

Conducted test results

No.1-9599-25-01-02_TR1-A201-R1

April 03, 2025

Test Standard(s)	NA - NI
	FCC 15.247 - NI
	FCC 15.247, ISED RSS247 - NI

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cn=Andreas Curette,
o=cetecom advanced
GmbH, ou=CUR-230601,
email=andreas.curette@cet
ecomadvanced.com, c=DE
2025.04.03 14:03:07 +02'00'

Authorized

Andreas Curette
Lab Manager
Radio Labs

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NA # Peak output power 3MHz/3MHz ~ BT LE 1 Msps

References

TC start	31.03.2025 14:27:21
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	5.1.6.4
Standard Version	NA NI
Method	
Description	Peak OP 3MHz/3MHz - BT LE 1 Msps
Information	

EUT Common Settings BT Low Energy

Intermodulation value N	3
Image freq. Low Mid High [MHz]	0 0 0
Power class	2
1 Mbps supported	True TXpayload 255 RXpayload 255
2 Mbps supported	False TXpayload 255 RXpayload 255
Longrange S8 supported	False TXpayload 255 RXpayload 255
Longrange S2 supported	False TXpayload 255 RXpayload 255
Signaling settings	None HCI 1 2400 None S1 None On
Signaling RF settings	RF1com 0 0 On
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70
Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0

Test Parameter

Technology to test	BT LE 1 Msps
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2402
Frequency mid to test	False Freq [MHz] 2440
Frequency high to test	False Freq [MHz] 2480
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.7
Full path type	EUT_SA_GEN_SIG
Full path name	EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/

Test Parameter

Switch bits

00010001:00010001:00000000:00000001

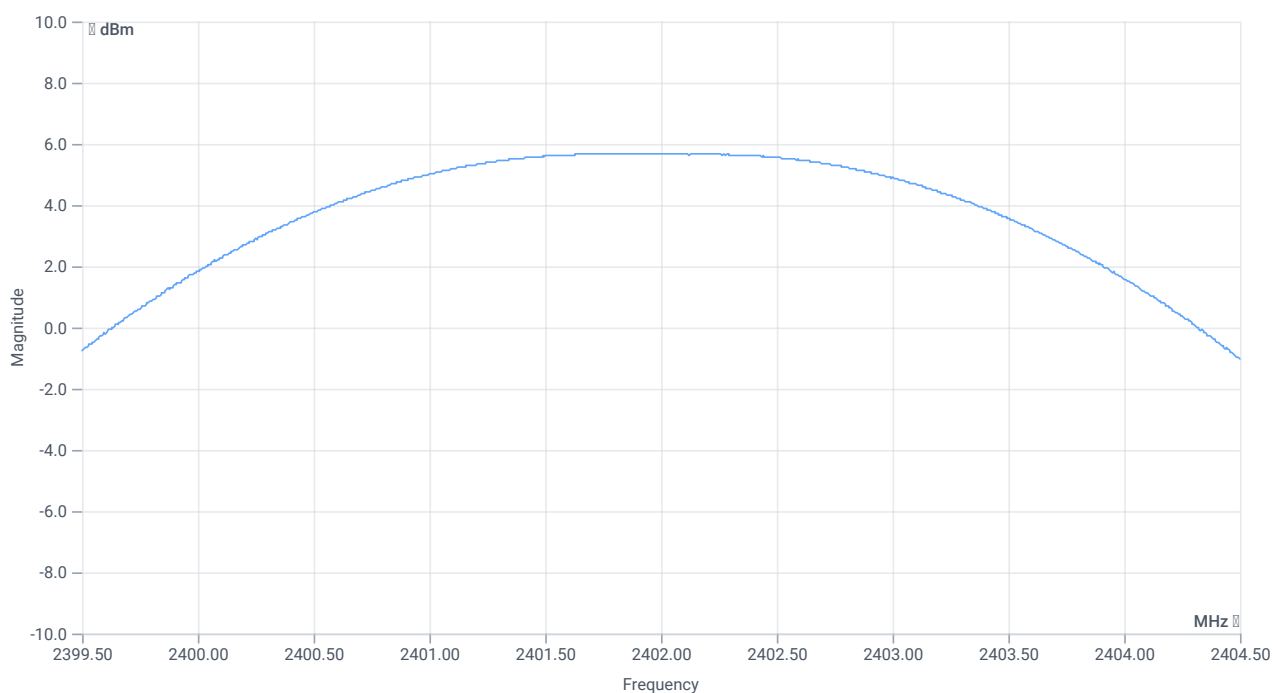
Test at TX 2402 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.63	dBm	INFO
Ref. frequency	---	---	2402.200	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	15.63 8.85 25
Start [MHz] Stop [MHz]	2399.500 2404.500
RBW [MHz] VBW [MHz]	3.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1000 10 1001 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Peak power	---	---	5.69	dBm	INFO
Peak power	---	---	3.706807	mW	INFO
Frequency at peak	---	---	2401.925	MHz	INFO

Verdict

PASS

FCC 15.247 # Maximum peak conducted output power DTS ~ BT LE 1 Msps

References

TC start	31.03.2025 14:27:52
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	5.1.6.4
Standard Version	FCC 15.247 NI
Method	DTS: KDB 558074 D01 V05 - Chapter 8.3.1.1 RBW ≥ DTS Bandwidth
Description	FCC 15.247 Maximum peak output power conducted DTS - BT LE 1 Msps
Information	

EUT Common Settings BT Low Energy

Intermodulation value N	3
Image freq. Low Mid High [MHz]	0 0 0
Power class	2
1 Mbps supported	True TXpayload 255 RXpayload 255
2 Mbps supported	False TXpayload 255 RXpayload 255
Longrange S8 supported	False TXpayload 255 RXpayload 255
Longrange S2 supported	False TXpayload 255 RXpayload 255
Signaling settings	None HCI 1 2400 None S1 None On
Signaling RF settings	RF1com 0 0 On
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70
Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0

Test Parameter

Technology to test	BT LE 1 Msps
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2402
Frequency mid to test	False Freq [MHz] 2440
Frequency high to test	False Freq [MHz] 2480
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.7

Test Parameter

Full path type	EUT_SA_GEN_SIG
Full path name	EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/
Switch bits	00010001:00010001:00000000:00000001

Test at TX 2402 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.66	dBm	INFO
Ref. frequency	---	---	2402.200	MHz	INFO

READ SA SETTINGS:

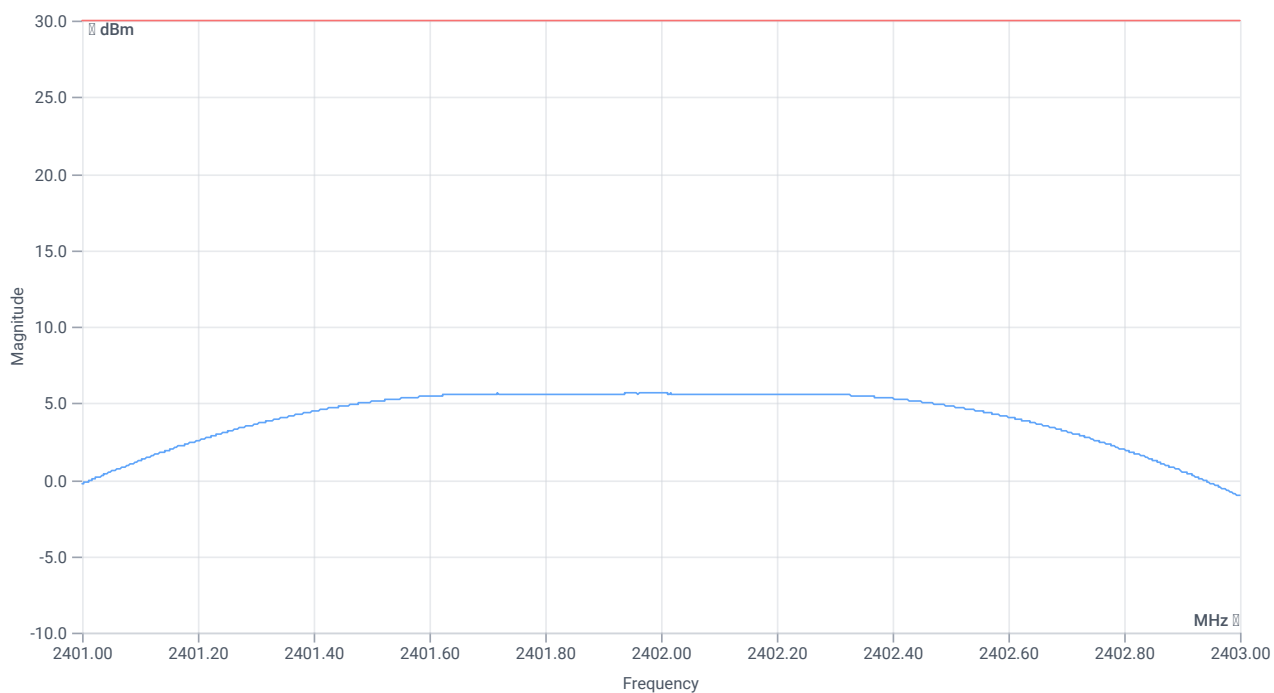
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.66 8.85 20
Start [MHz] Stop [MHz]	2401.000 2403.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 10001 SWE

DTS bandwidth

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
DTS bandwidth (6dB)	---	---	657	kHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	15.66 8.85 25
Start [MHz] Stop [MHz]	2401.000 2403.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 1001 SWE



Peak output power

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Peak power	---	30.00	5.64	dBm	PASS
Peak power	---	1000	3.664376	mW	PASS
Frequency at peak	---	---	2401.992	MHz	INFO

Verdict

PASS

FCC 15.247 # Bandwidth 6dB DTS ~ BT LE 1 Msps

References

TC start	31.03.2025 14:28:37
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	5.1.6.4
Standard Version	FCC 15.247 NI
Method	
Description	FCC 15.247 Bandwidth 6dB DTS - BT LE 1 Msps
Information	

EUT Common Settings BT Low Energy

Intermodulation value N	3
Image freq. Low Mid High [MHz]	0 0 0
Power class	2
1 Mbps supported	True TXpayload 255 RXpayload 255
2 Mbps supported	False TXpayload 255 RXpayload 255
Longrange S8 supported	False TXpayload 255 RXpayload 255
Longrange S2 supported	False TXpayload 255 RXpayload 255
Signaling settings	None HCI 1 2400 None S1 None On
Signaling RF settings	RF1com 0 0 On
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70
Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0

Test Parameter

Technology to test	BT LE 1 Msps
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2402
Frequency mid to test	False Freq [MHz] 2440
Frequency high to test	False Freq [MHz] 2480
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.7
Full path type	EUT_SA_GEN_SIG
Full path name	EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/

Test Parameter

Switch bits

00010001:00010001:00000000:00000001

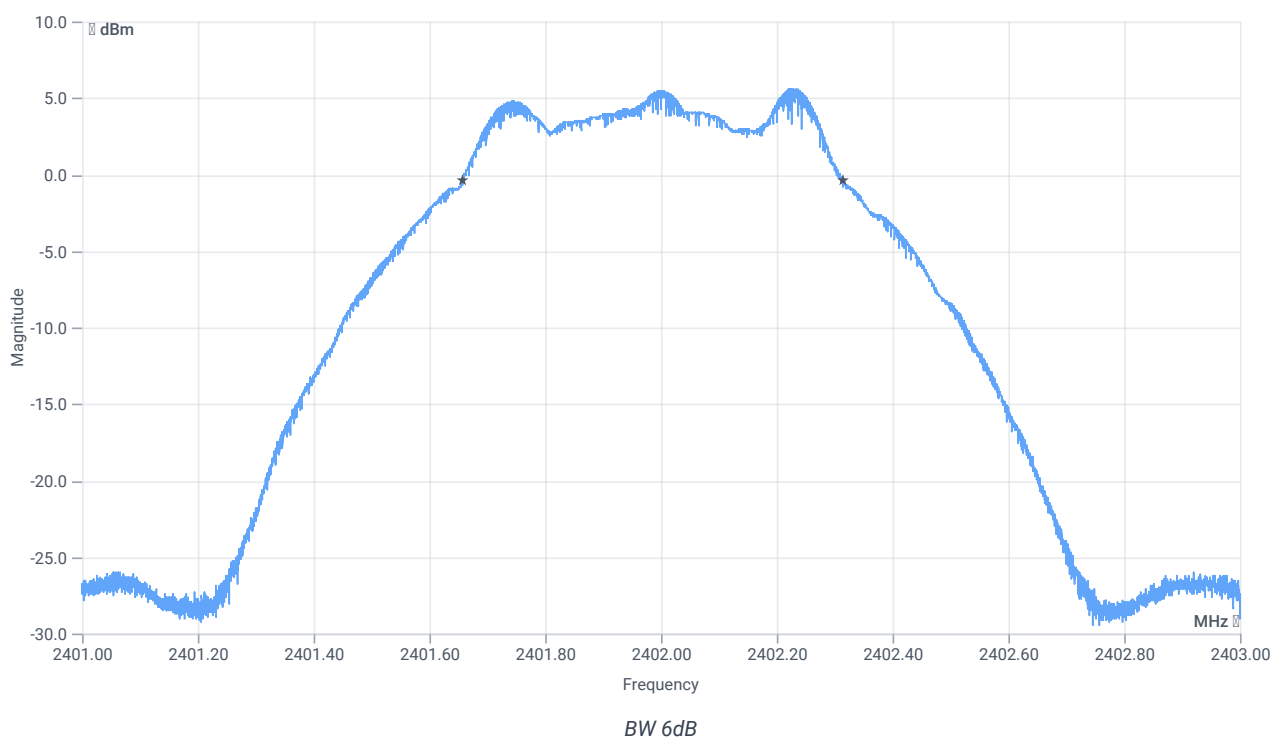
Test at TX 2402 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.66	dBm	INFO
Ref. frequency	---	---	2402.200	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.66 8.85 20
Start [MHz] Stop [MHz]	2401.000 2403.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 10001 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
DTS bandwidth (6dB)	500	---	656	kHz	PASS

Verdict

PASS

FCC 15.247 # Peak psd DTS ~ BT LE 1 Msps

References

TC start	31.03.2025 14:29:09
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	5.1.6.4
Standard Version	FCC 15.247 NI
Method	DTS: KDB 558074 D01 V05 - Chapter 8.4 DTS maximum power spectral density level in the fundamental emission
Description	FCC 15.247 Peak psd DTS - BT LE 1 Msps
Information	

EUT Common Settings BT Low Energy

Intermodulation value N	3
Image freq. Low Mid High [MHz]	0 0 0
Power class	2
1 Mbps supported	True TXpayload 255 RXpayload 255
2 Mbps supported	False TXpayload 255 RXpayload 255
Longrange S8 supported	False TXpayload 255 RXpayload 255
Longrange S2 supported	False TXpayload 255 RXpayload 255
Signaling settings	None HCI 1 2400 None S1 None On
Signaling RF settings	RF1com 0 0 On
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70
Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0

Test Parameter

Technology to test	BT LE 1 Msps
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2402
Frequency mid to test	False Freq [MHz] 2440
Frequency high to test	False Freq [MHz] 2480
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.7
Full path type	EUT_SA_GEN_SIG

Test Parameter

Full path name	EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/
Switch bits	00010001:00010001:00000000:00000001

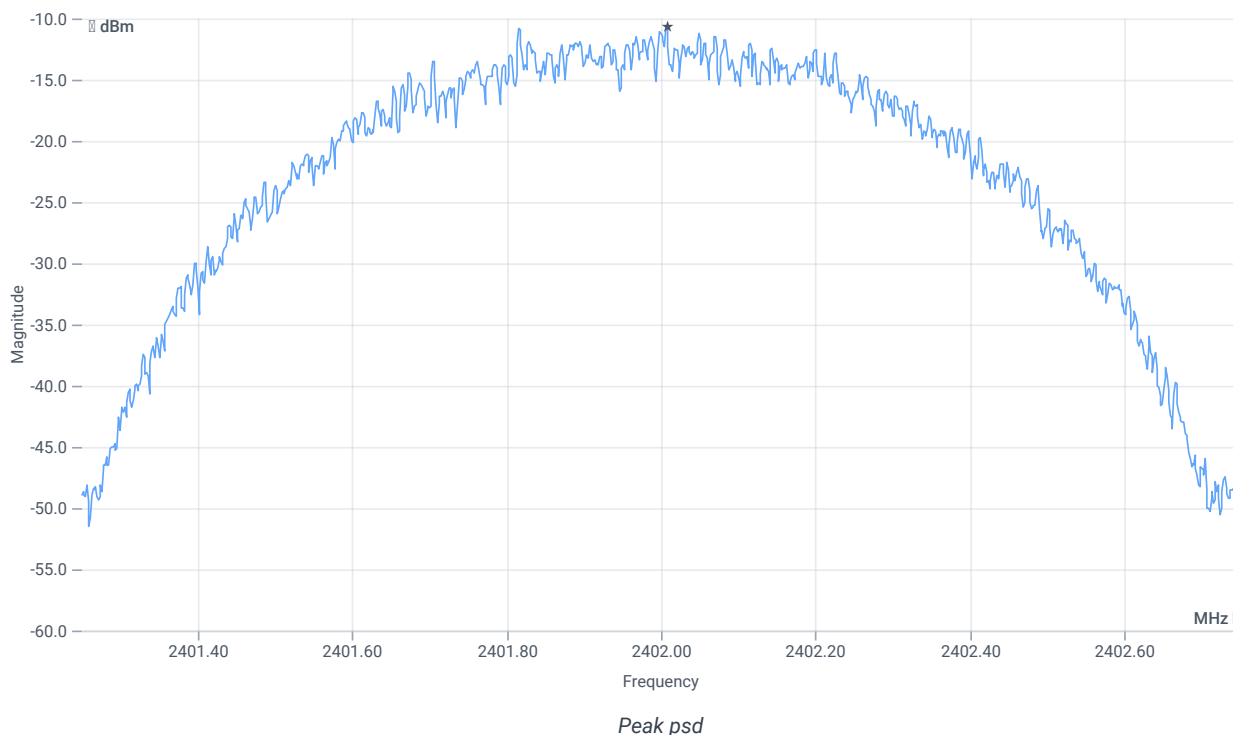
Test at TX 2402 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.67	dBm	INFO
Ref. frequency	---	---	2402.200	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.67 8.85 20
Start [MHz] Stop [MHz]	2401.250 2402.750
RBW [MHz] VBW [MHz]	0.003000 0.010000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1000 20 1001 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Peak psd	---	8	-10.71	dBm/3KHz	PASS

Verdict

PASS

FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ BT LE 1 Msps

References

TC start	31.03.2025 14:29:51
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	5.1.6.4
Standard Version	FCC 15.247, ISED RSS247 NI
Method	
Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - BT LE 1 Msps
Information	

EUT Common Settings BT Low Energy

Intermodulation value N	3
Image freq. Low Mid High [MHz]	0 0 0
Power class	2
1 Mbps supported	True TXpayload 255 RXpayload 255
2 Mbps supported	False TXpayload 255 RXpayload 255
Longrange S8 supported	False TXpayload 255 RXpayload 255
Longrange S2 supported	False TXpayload 255 RXpayload 255
Signaling settings	None HCI 1 2400 None S1 None On
Signaling RF settings	RF1com 0 0 On
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70
Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0

Test Parameter

Technology to test	BT LE 1 Msps
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2402
Frequency mid to test	False Freq [MHz] 2440
Frequency high to test	False Freq [MHz] 2480
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.7
Full path type	EUT_SA_GEN_SIG

Test Parameter

Full path name	EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/
Switch bits	00010001:00010001:00000000:00000001

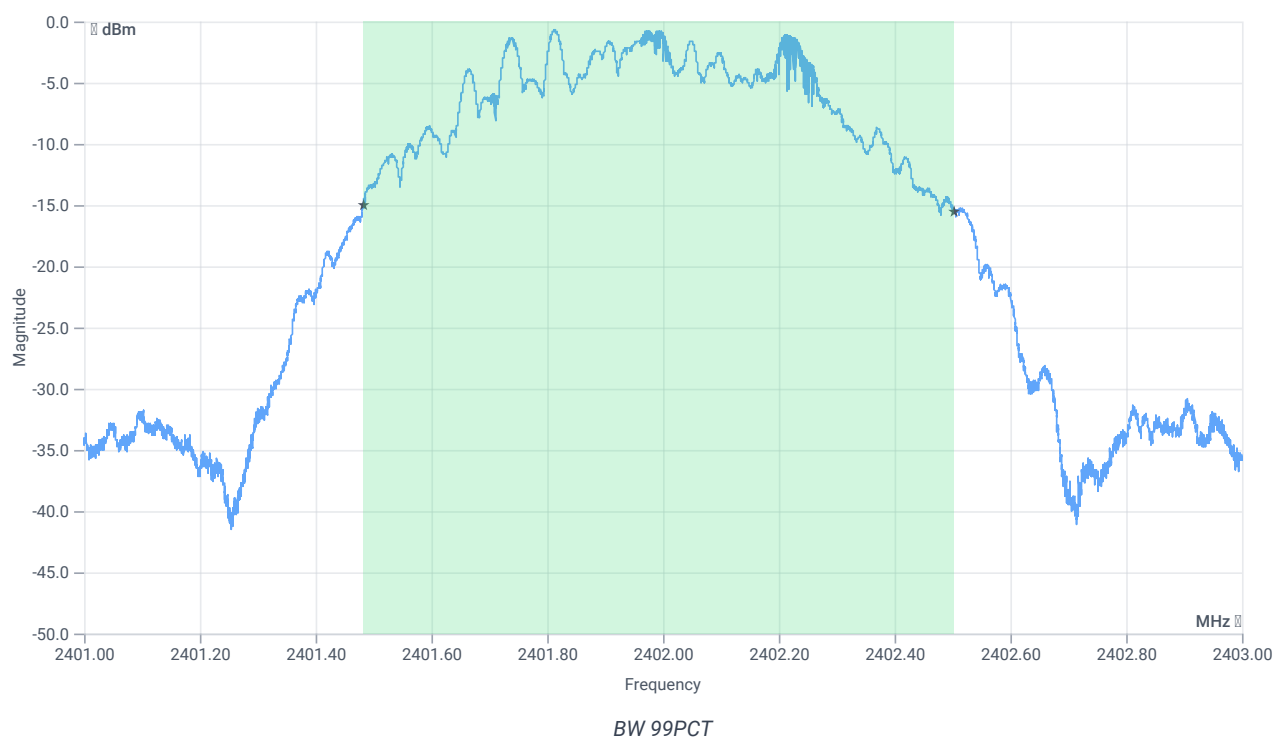
Test at TX 2402 MHz

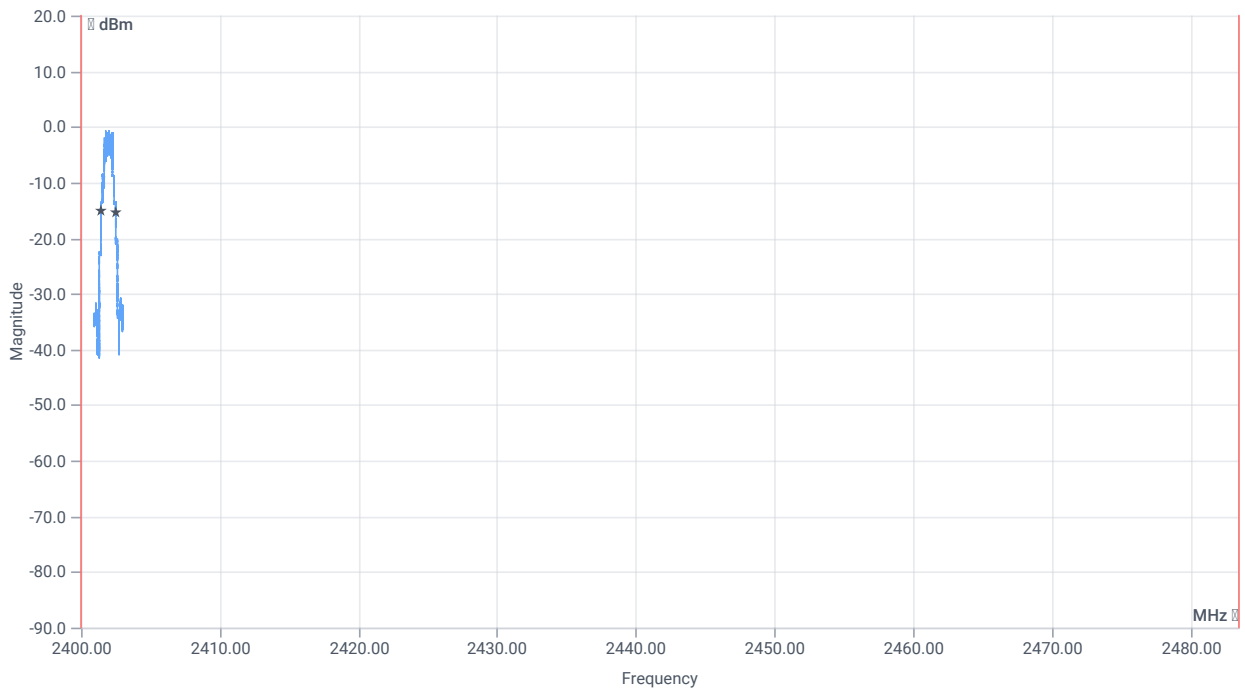
RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.65	dBm	INFO
Ref. frequency	---	---	2402.200	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.65 8.85 20
Start [MHz] Stop [MHz]	2401.000 2403.000
RBW [MHz] VBW [MHz]	0.020000 0.100000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 10001 SWE

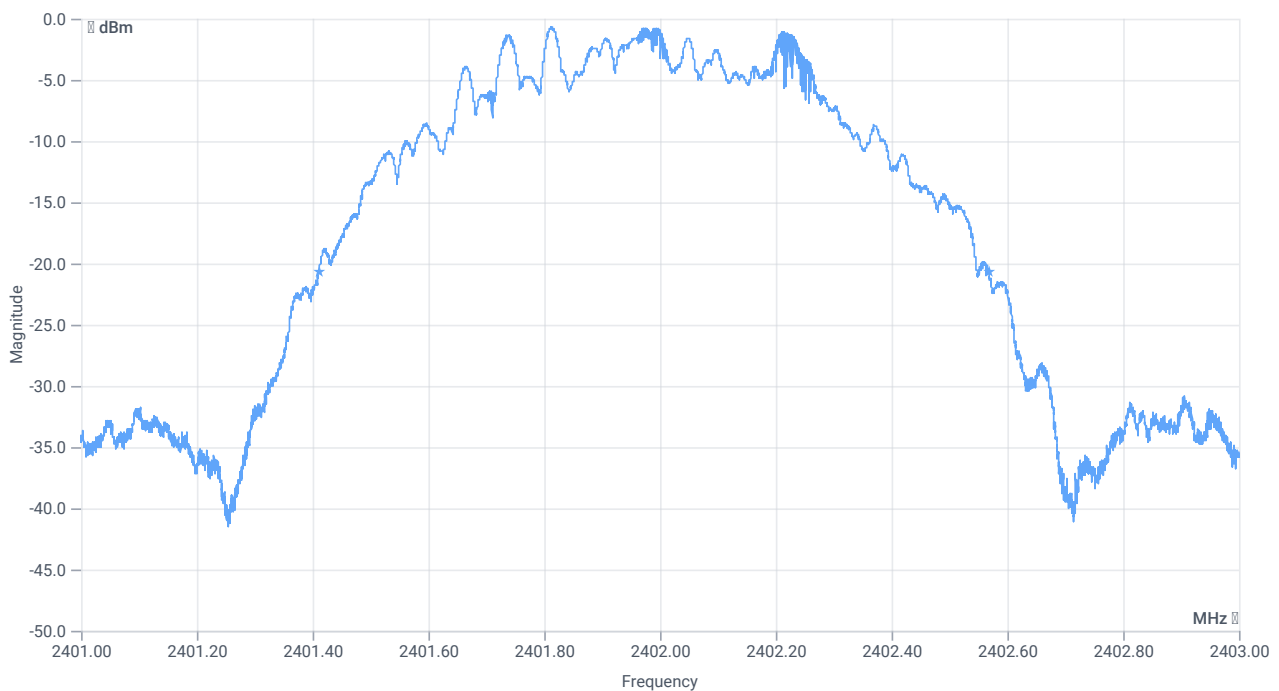




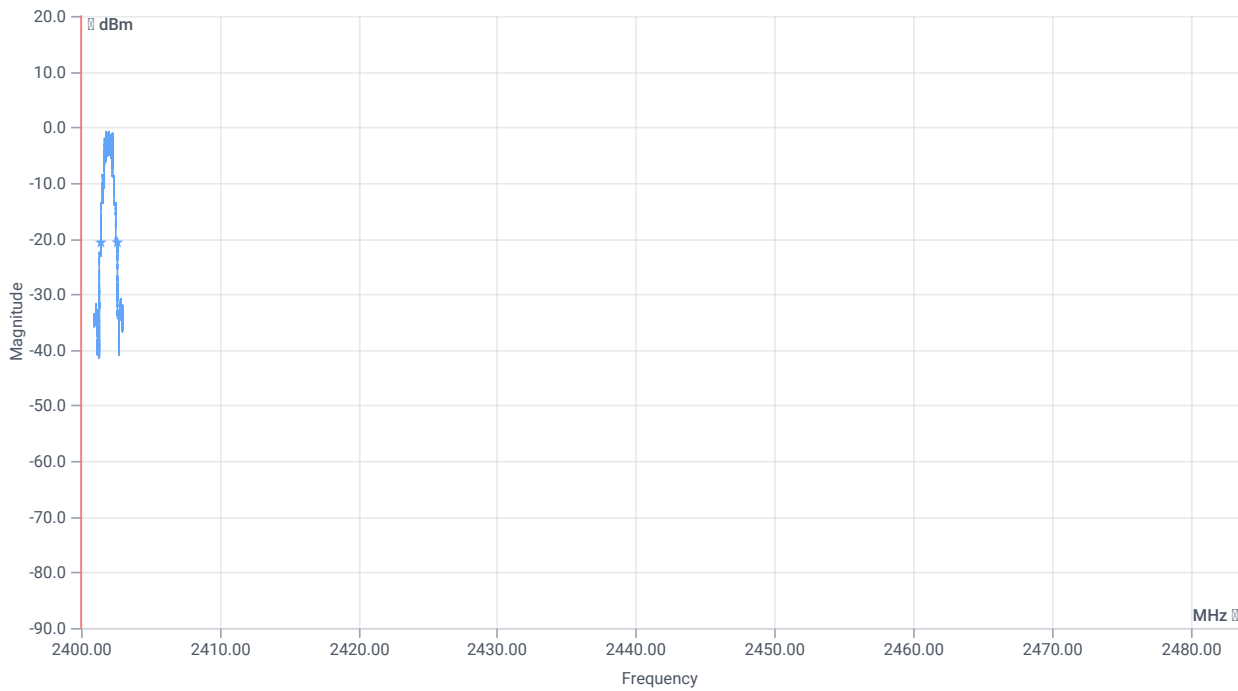
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	1022.000	kHz	INFO
T1 99%	2400.000000	---	2401.4821	MHz	PASS
T2 99%	---	2483.500000	2402.5041	MHz	PASS



BW 20dB



BW within band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	1157	kHz	INFO
T1 20dB	2400.000000	---	2401.4102	MHz	PASS
T2 20dB	---	2483.500000	2402.5676	MHz	PASS

Verdict

PASS

FCC 15.247 # TX spurious conducted 20dBc ~ BT LE 1 Msps

References

TC start	31.03.2025 14:30:31
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	5.1.6.4
Standard Version	FCC 15.247 NI
Method	IF DTS then 8.5 DTS emissions in non-restricted frequency bands: Subclause 11.11 of ANSI C63.10 is applicable
Description	FCC 15.247 TX emissions conducted DTS - BT LE 1 Msps
Information	

EUT Common Settings BT Low Energy

Intermodulation value N	3
Image freq. Low Mid High [MHz]	0 0 0
Power class	2
1 Mbps supported	True TXpayload 255 RXpayload 255
2 Mbps supported	False TXpayload 255 RXpayload 255
Longrange S8 supported	False TXpayload 255 RXpayload 255
Longrange S2 supported	False TXpayload 255 RXpayload 255
Signaling settings	None HCI 1 2400 None S1 None On
Signaling RF settings	RF1com 0 0 On
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70
Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0

Test Parameter

Technology to test	BT LE 1 Msps
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	True Freq [MHz] 2402
Frequency mid to test	False Freq [MHz] 2440
Frequency high to test	False Freq [MHz] 2480
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.7
Full path type	EUT_SA_GEN_SIG

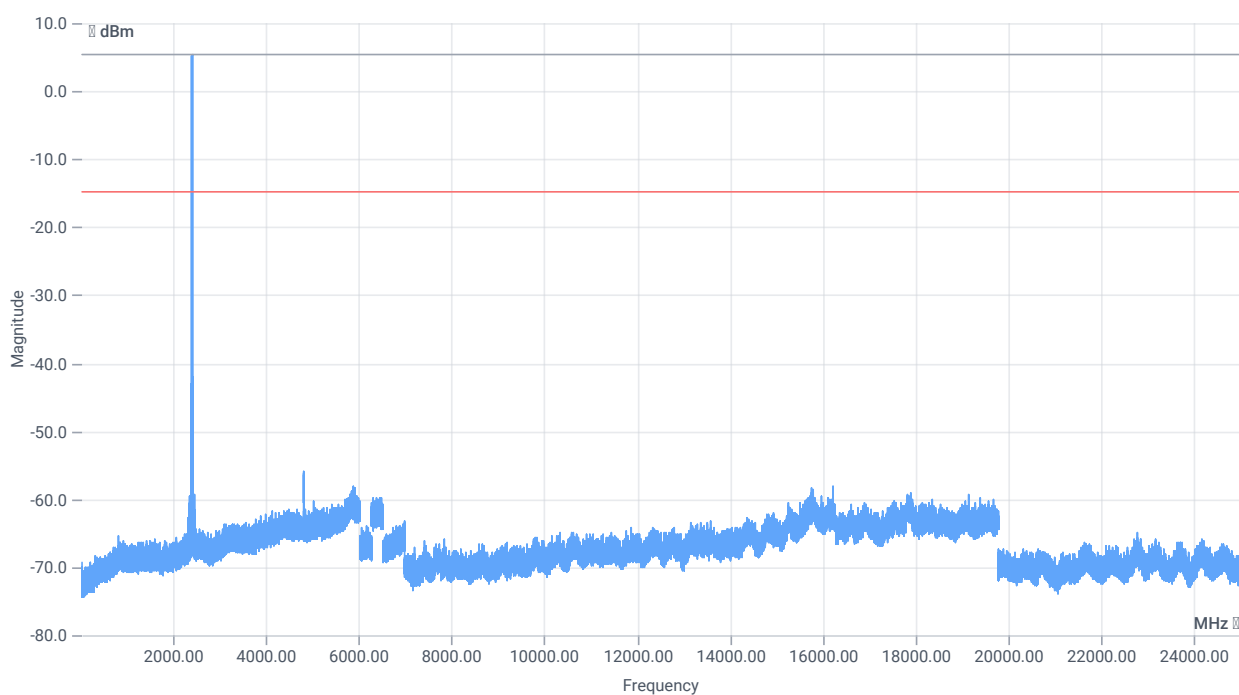
Test Parameter

Full path name	EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/
Switch bits	00010001:00010001:00000000:00000001

Test at TX 2402 MHz

RESULT: Reference power cond.

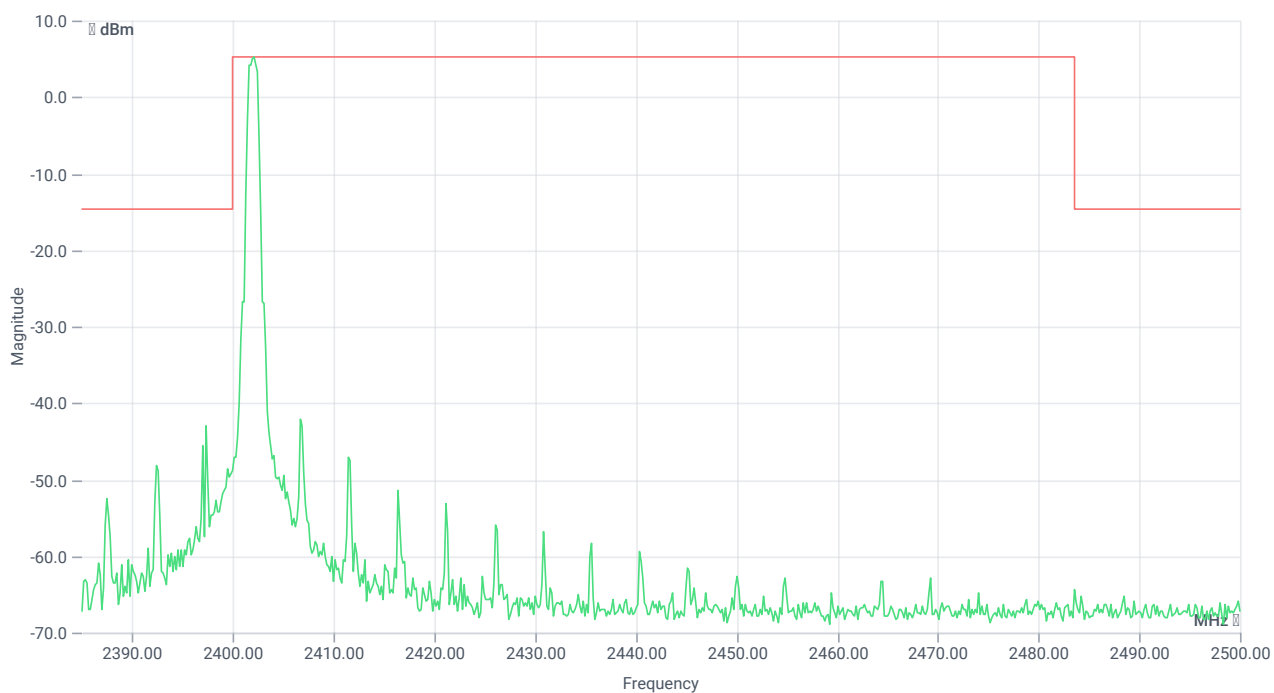
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.68	dBm	INFO
Ref. frequency	---	---	2402.200	MHz	INFO



TX emissions

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	5.68 17.03 5
Start [MHz] Stop [MHz]	24780.000 25000.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	200 25 1501 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Reference @ 2402.17 MHz	---	---	5.29	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 30 MHz	0	---	-130.75	dB	INFO

Verdict

PASS

NA # Peak output power 3MHz/3MHz ~ BT LE 1 Msps

References

TC start	31.03.2025 14:46:13
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	5.1.6.4
Standard Version	NA NI
Method	
Description	Peak OP 3MHz/3MHz - BT LE 1 Msps
Information	

EUT Common Settings BT Low Energy

Intermodulation value N	3
Image freq. Low Mid High [MHz]	0 0 0
Power class	2
1 Mbps supported	True TXpayload 255 RXpayload 255
2 Mbps supported	False TXpayload 255 RXpayload 255
Longrange S8 supported	False TXpayload 255 RXpayload 255
Longrange S2 supported	False TXpayload 255 RXpayload 255
Signaling settings	None HCI 1 2400 None S1 None On
Signaling RF settings	RF1com 0 0 On
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70
Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0

Test Parameter

Technology to test	BT LE 1 Msps
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2402
Frequency mid to test	True Freq [MHz] 2440
Frequency high to test	False Freq [MHz] 2480
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.7
Full path type	EUT_SA_GEN_SIG
Full path name	EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/

Test Parameter

Switch bits

00010001:00010001:00000000:00000001

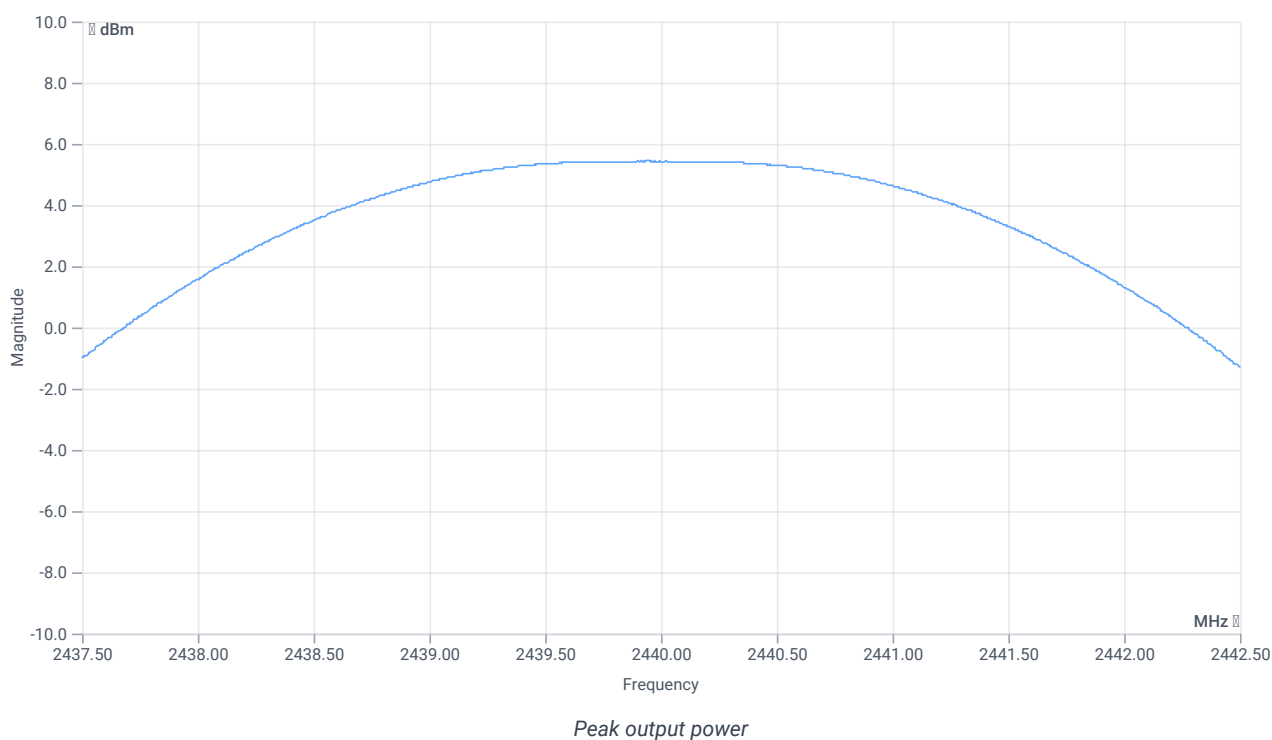
Test at TX 2440 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.39	dBm	INFO
Ref. frequency	---	---	2440.200	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	15.39 8.94 25
Start [MHz] Stop [MHz]	2437.500 2442.500
RBW [MHz] VBW [MHz]	3.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1000 10 1001 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Peak power	---	---	5.44	dBm	INFO
Peak power	---	---	3.499452	mW	INFO
Frequency at peak	---	---	2439.96	MHz	INFO

Verdict

PASS

FCC 15.247 # Maximum peak conducted output power DTS ~ BT LE 1 Msps

References

TC start	31.03.2025 14:46:45
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	5.1.6.4
Standard Version	FCC 15.247 NI
Method	DTS: KDB 558074 D01 V05 - Chapter 8.3.1.1 RBW ≥ DTS Bandwidth
Description	FCC 15.247 Maximum peak output power conducted DTS - BT LE 1 Msps
Information	

EUT Common Settings BT Low Energy

Intermodulation value N	3
Image freq. Low Mid High [MHz]	0 0 0
Power class	2
1 Mbps supported	True TXpayload 255 RXpayload 255
2 Mbps supported	False TXpayload 255 RXpayload 255
Longrange S8 supported	False TXpayload 255 RXpayload 255
Longrange S2 supported	False TXpayload 255 RXpayload 255
Signaling settings	None HCI 1 2400 None S1 None On
Signaling RF settings	RF1com 0 0 On
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70
Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0

Test Parameter

Technology to test	BT LE 1 Msps
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2402
Frequency mid to test	True Freq [MHz] 2440
Frequency high to test	False Freq [MHz] 2480
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.7

Test Parameter

Full path type	EUT_SA_GEN_SIG
Full path name	EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/
Switch bits	00010001:00010001:00000000:00000001

Test at TX 2440 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.39	dBm	INFO
Ref. frequency	---	---	2440.200	MHz	INFO

READ SA SETTINGS:

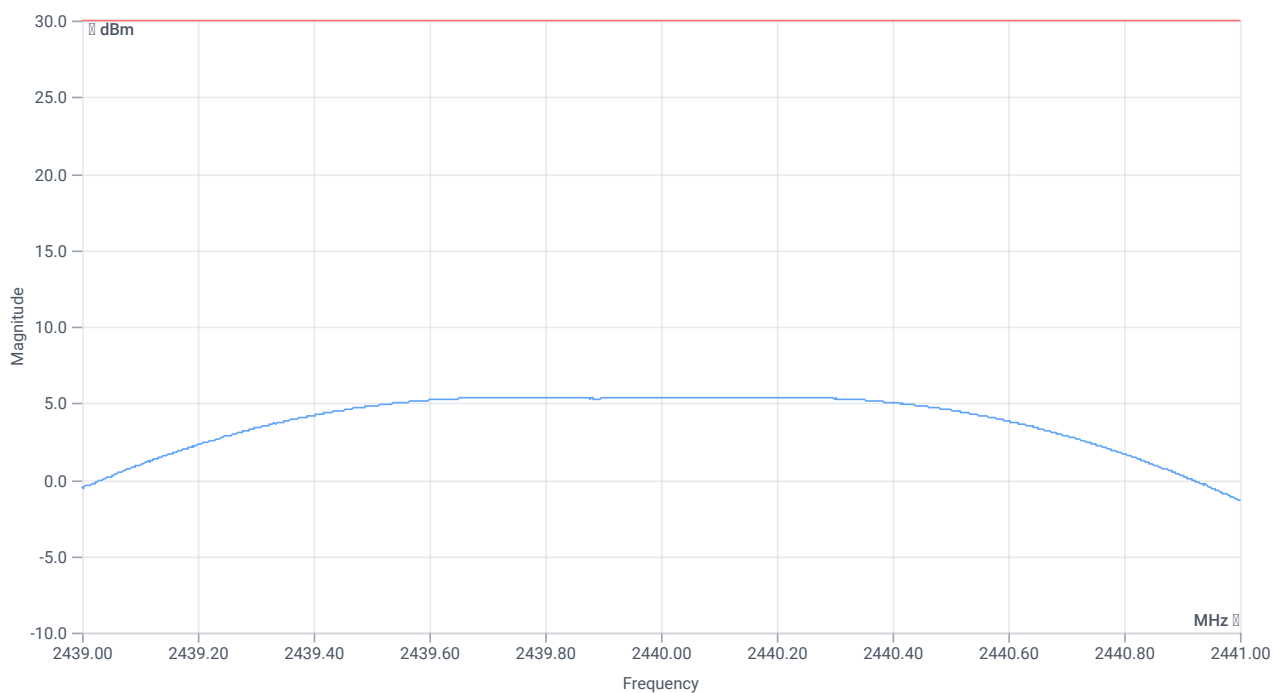
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.39 8.94 20
Start [MHz] Stop [MHz]	2439.000 2441.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 10001 SWE

DTS bandwidth

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
DTS bandwidth (6dB)	---	---	655	kHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	15.39 8.94 25
Start [MHz] Stop [MHz]	2439.000 2441.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 1001 SWE



Peak output power

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Peak power	---	30.00	5.38	dBm	PASS
Peak power	---	1000	3.451437	mW	PASS
Frequency at peak	---	---	2439.962	MHz	INFO

Verdict

PASS

FCC 15.247 # Bandwidth 6dB DTS ~ BT LE 1 Msps

References

TC start	31.03.2025 14:47:30
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	5.1.6.4
Standard Version	FCC 15.247 NI
Method	
Description	FCC 15.247 Bandwidth 6dB DTS - BT LE 1 Msps
Information	

EUT Common Settings BT Low Energy

Intermodulation value N	3
Image freq. Low Mid High [MHz]	0 0 0
Power class	2
1 Mbps supported	True TXpayload 255 RXpayload 255
2 Mbps supported	False TXpayload 255 RXpayload 255
Longrange S8 supported	False TXpayload 255 RXpayload 255
Longrange S2 supported	False TXpayload 255 RXpayload 255
Signaling settings	None HCI 1 2400 None S1 None On
Signaling RF settings	RF1com 0 0 On
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70
Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0

Test Parameter

Technology to test	BT LE 1 Msps
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2402
Frequency mid to test	True Freq [MHz] 2440
Frequency high to test	False Freq [MHz] 2480
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.7
Full path type	EUT_SA_GEN_SIG
Full path name	EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/

Test Parameter

Switch bits

00010001:00010001:00000000:00000001

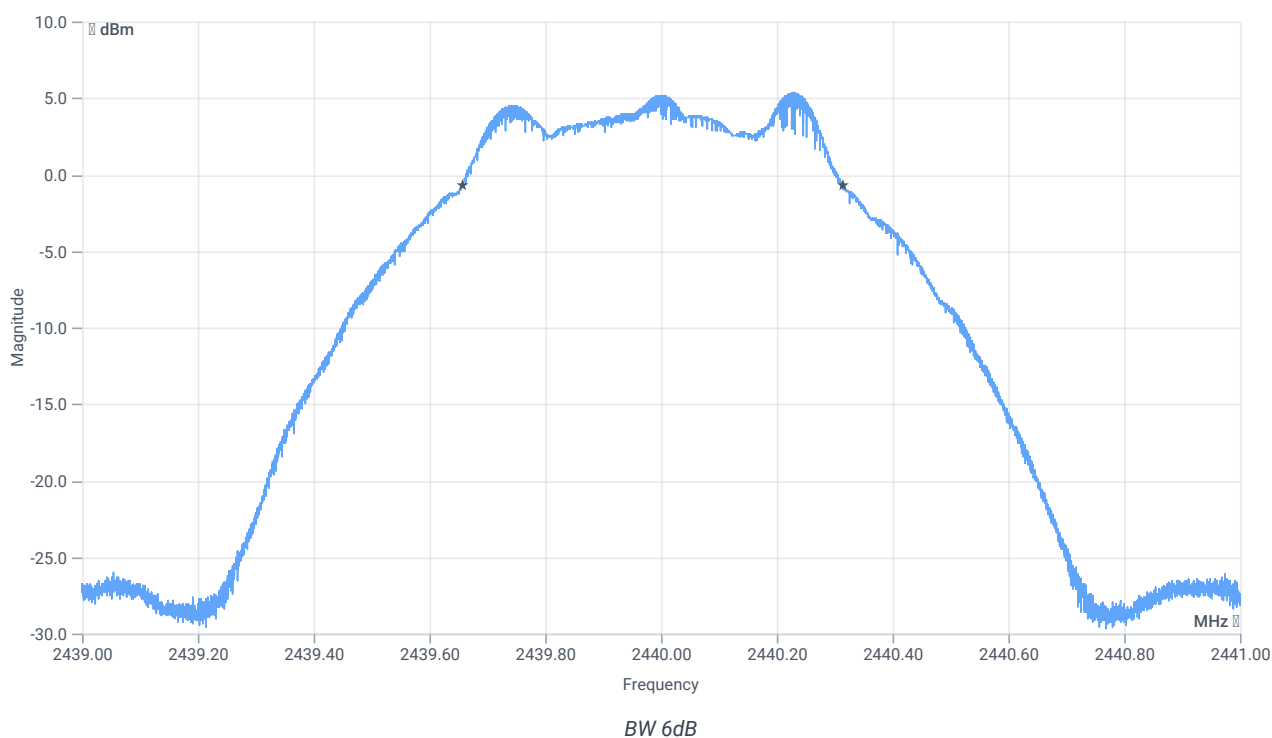
Test at TX 2440 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.39	dBm	INFO
Ref. frequency	---	---	2440.200	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.39 8.94 20
Start [MHz] Stop [MHz]	2439.000 2441.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 10001 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
DTS bandwidth (6dB)	500	---	656	kHz	PASS

Verdict

PASS

FCC 15.247 # Peak psd DTS ~ BT LE 1 Msps

References

TC start	31.03.2025 14:48:02
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	5.1.6.4
Standard Version	FCC 15.247 NI
Method	DTS: KDB 558074 D01 V05 - Chapter 8.4 DTS maximum power spectral density level in the fundamental emission
Description	FCC 15.247 Peak psd DTS - BT LE 1 Msps
Information	

EUT Common Settings BT Low Energy

Intermodulation value N	3
Image freq. Low Mid High [MHz]	0 0 0
Power class	2
1 Mbps supported	True TXpayload 255 RXpayload 255
2 Mbps supported	False TXpayload 255 RXpayload 255
Longrange S8 supported	False TXpayload 255 RXpayload 255
Longrange S2 supported	False TXpayload 255 RXpayload 255
Signaling settings	None HCI 1 2400 None S1 None On
Signaling RF settings	RF1com 0 0 On
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70
Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0

Test Parameter

Technology to test	BT LE 1 Msps
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2402
Frequency mid to test	True Freq [MHz] 2440
Frequency high to test	False Freq [MHz] 2480
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.7
Full path type	EUT_SA_GEN_SIG

Test Parameter

Full path name	EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/
Switch bits	00010001:00010001:00000000:00000001

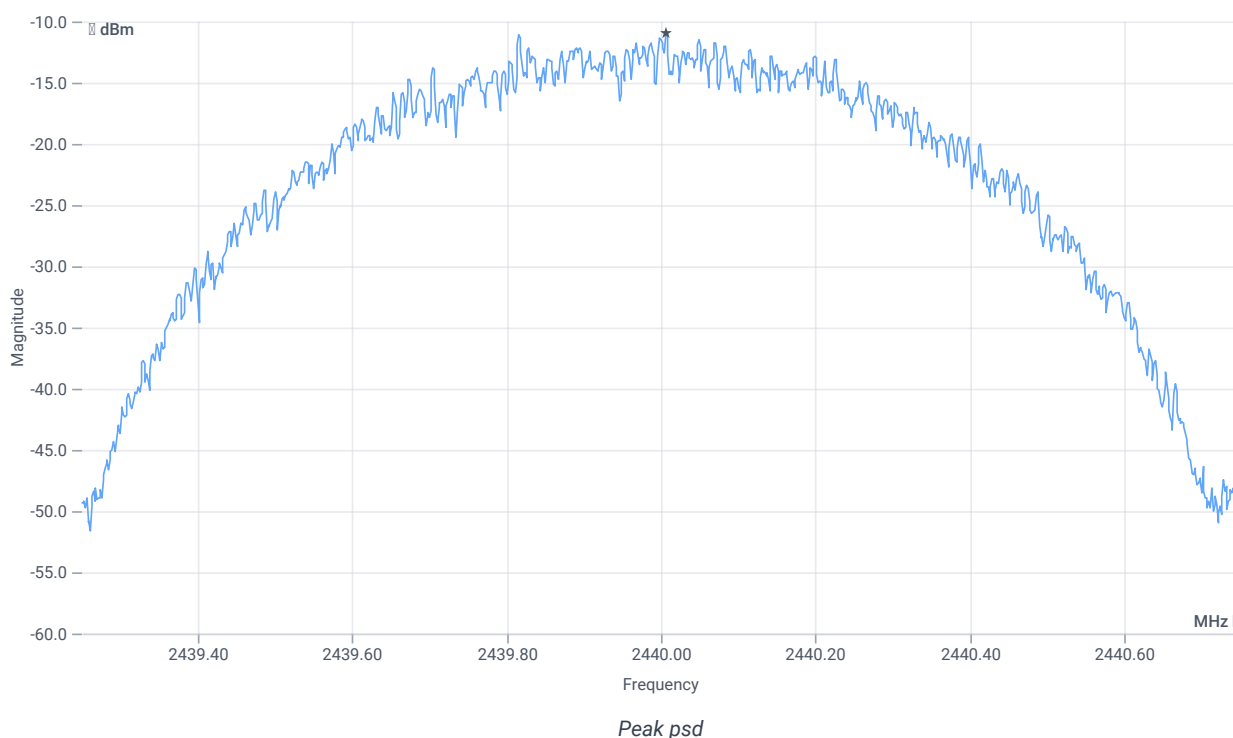
Test at TX 2440 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.40	dBm	INFO
Ref. frequency	---	---	2440.200	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.40 8.94 20
Start [MHz] Stop [MHz]	2439.250 2440.750
RBW [MHz] VBW [MHz]	0.003000 0.010000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1000 20 1001 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Peak psd	---	8	-10.94	dBm/3KHz	PASS

Verdict

PASS

FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ BT LE 1 Msps

References

TC start	31.03.2025 14:48:43
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	5.1.6.4
Standard Version	FCC 15.247, ISED RSS247 NI
Method	
Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - BT LE 1 Msps
Information	

EUT Common Settings BT Low Energy

Intermodulation value N	3
Image freq. Low Mid High [MHz]	0 0 0
Power class	2
1 Mbps supported	True TXpayload 255 RXpayload 255
2 Mbps supported	False TXpayload 255 RXpayload 255
Longrange S8 supported	False TXpayload 255 RXpayload 255
Longrange S2 supported	False TXpayload 255 RXpayload 255
Signaling settings	None HCI 1 2400 None S1 None On
Signaling RF settings	RF1com 0 0 On
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70
Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0

Test Parameter

Technology to test	BT LE 1 Msps
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2402
Frequency mid to test	True Freq [MHz] 2440
Frequency high to test	False Freq [MHz] 2480
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.7
Full path type	EUT_SA_GEN_SIG

Test Parameter

Full path name	EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/
Switch bits	00010001:00010001:00000000:00000001

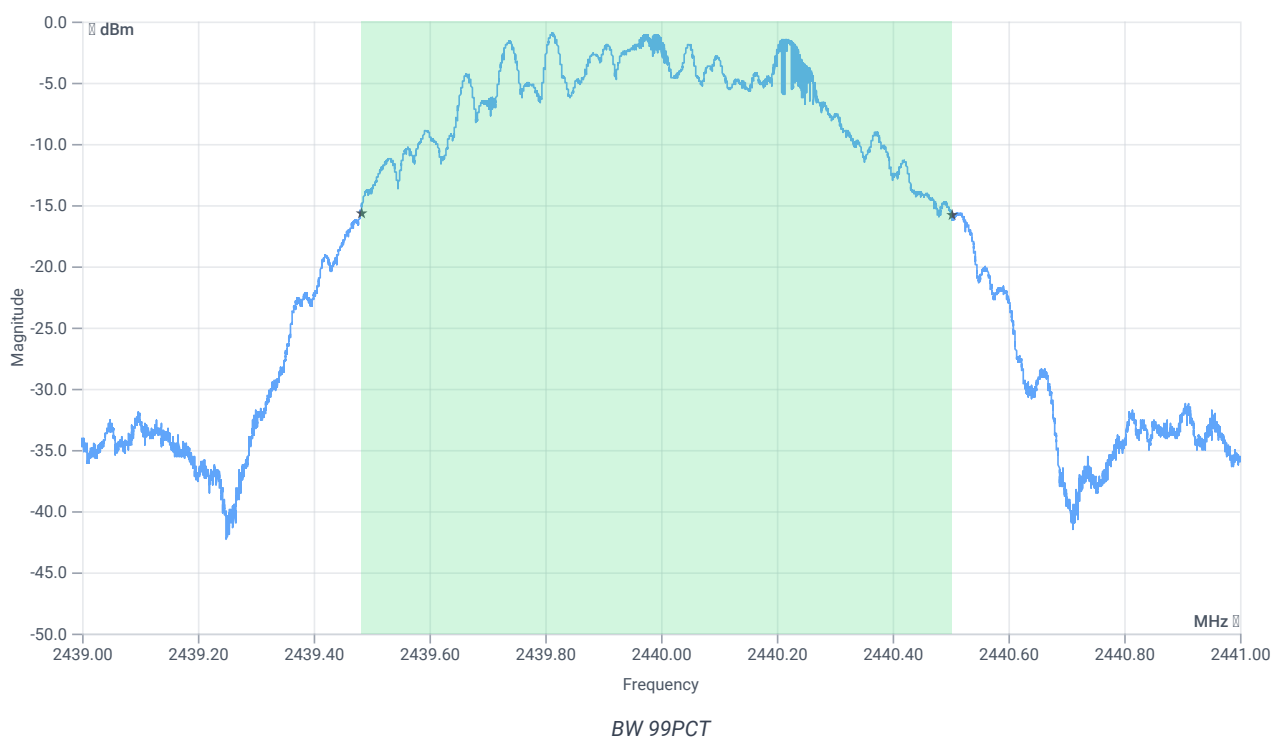
Test at TX 2440 MHz

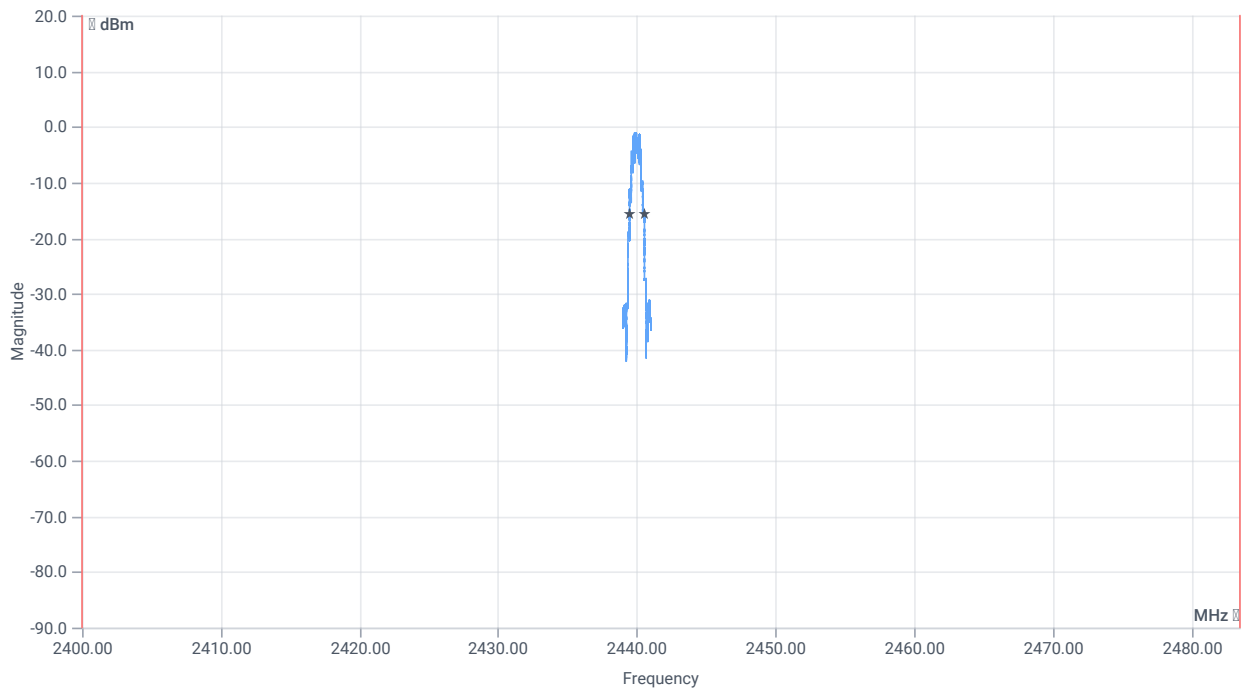
RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.39	dBm	INFO
Ref. frequency	---	---	2440.200	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.39 8.94 20
Start [MHz] Stop [MHz]	2439.000 2441.000
RBW [MHz] VBW [MHz]	0.020000 0.100000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 10001 SWE

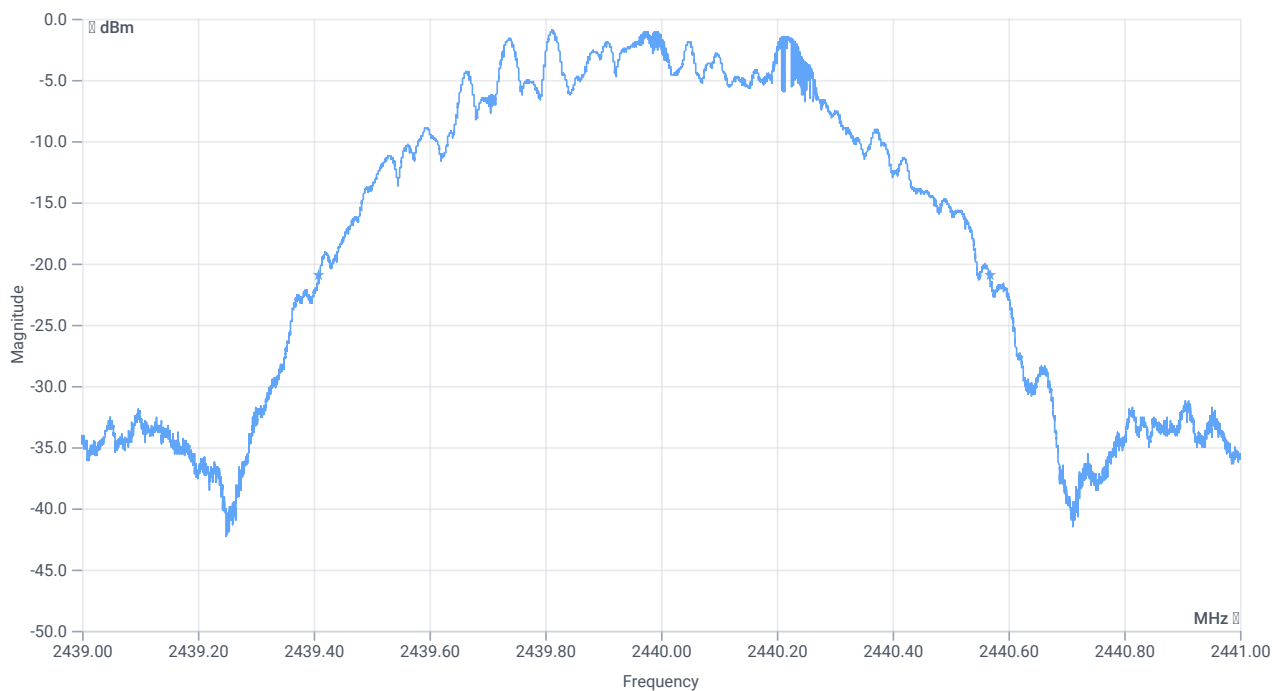




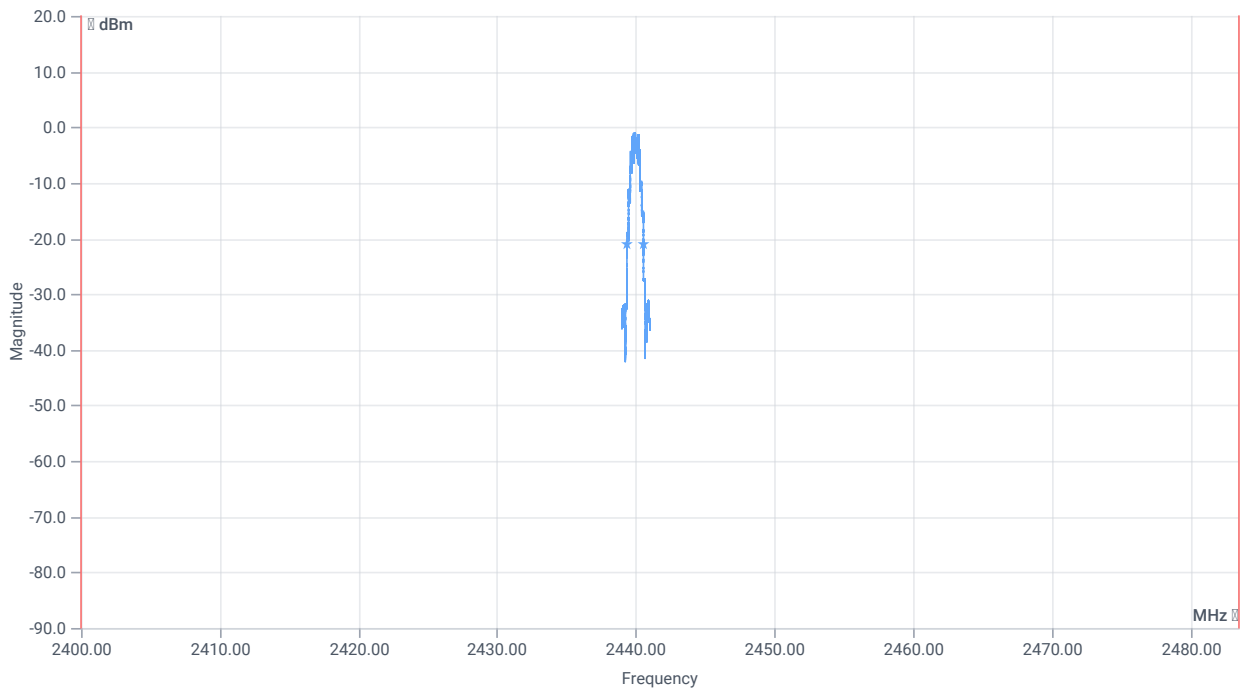
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	1022.000	kHz	INFO
T1 99%	2400.000000	---	2439.4817	MHz	PASS
T2 99%	---	2483.500000	2440.5037	MHz	PASS



BW 20dB



BW within band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	1158	kHz	INFO
T1 20dB	2400.000000	---	2439.4100	MHz	PASS
T2 20dB	---	2483.500000	2440.5678	MHz	PASS

Verdict

PASS

FCC 15.247 # TX spurious conducted 20dBc ~ BT LE 1 Msps

References

TC start	31.03.2025 14:49:23
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	5.1.6.4
Standard Version	FCC 15.247 NI
Method	IF DTS then 8.5 DTS emissions in non-restricted frequency bands: Subclause 11.11 of ANSI C63.10 is applicable
Description	FCC 15.247 TX emissions conducted DTS - BT LE 1 Msps
Information	

EUT Common Settings BT Low Energy

Intermodulation value N	3
Image freq. Low Mid High [MHz]	0 0 0
Power class	2
1 Mbps supported	True TXpayload 255 RXpayload 255
2 Mbps supported	False TXpayload 255 RXpayload 255
Longrange S8 supported	False TXpayload 255 RXpayload 255
Longrange S2 supported	False TXpayload 255 RXpayload 255
Signaling settings	None HCI 1 2400 None S1 None On
Signaling RF settings	RF1com 0 0 On
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70
Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0

Test Parameter

Technology to test	BT LE 1 Msps
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2402
Frequency mid to test	True Freq [MHz] 2440
Frequency high to test	False Freq [MHz] 2480
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.7
Full path type	EUT_SA_GEN_SIG

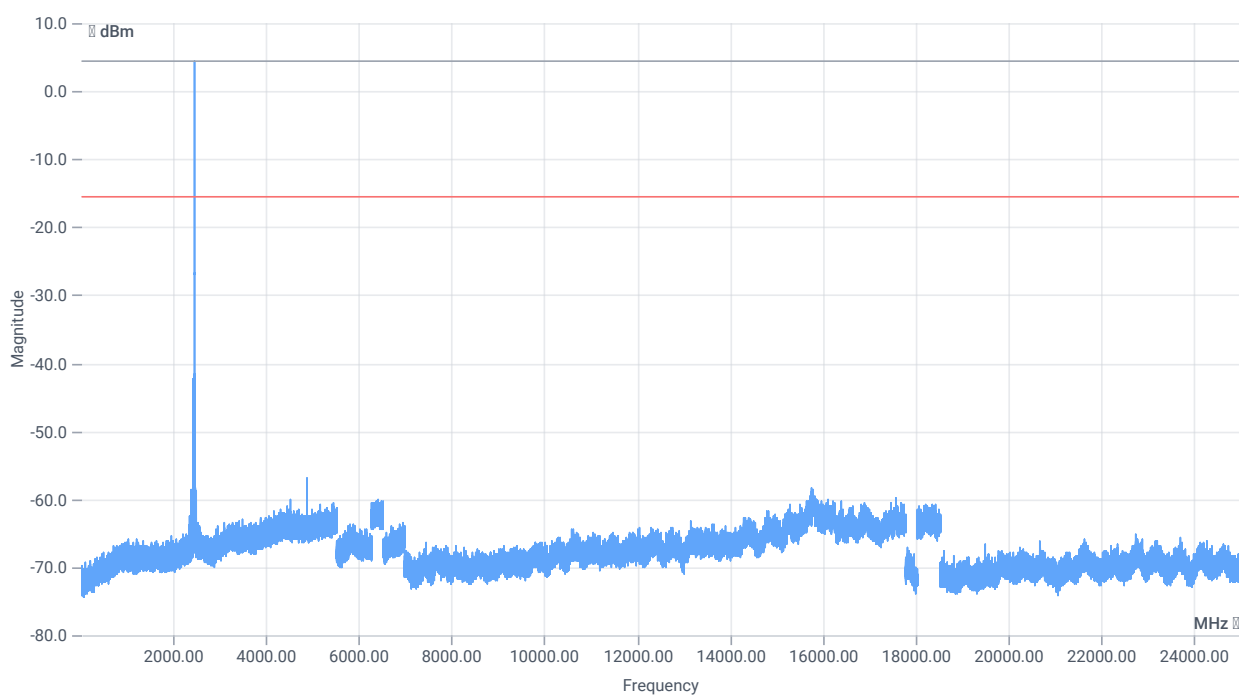
Test Parameter

Full path name	EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/
Switch bits	00010001:00010001:00000000:00000001

Test at TX 2440 MHz

RESULT: Reference power cond.

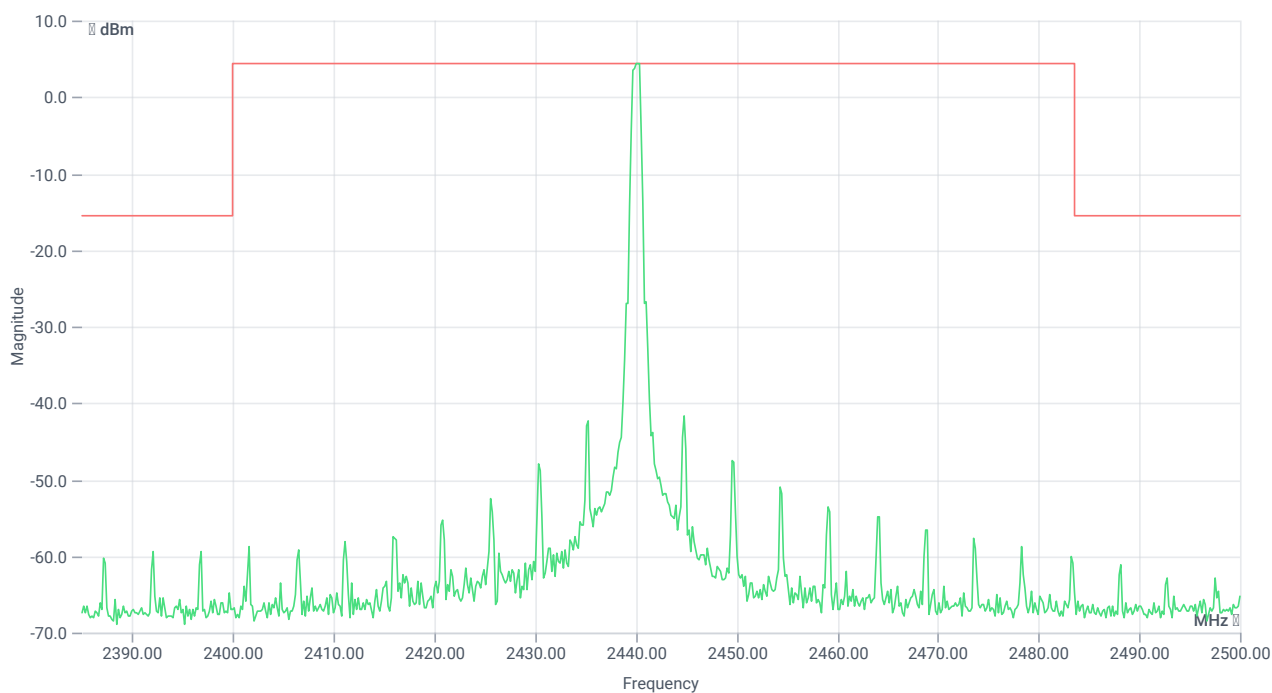
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.40	dBm	INFO
Ref. frequency	---	---	2440.200	MHz	INFO



TX emissions

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	5.40 17.03 5
Start [MHz] Stop [MHz]	24780.000 25000.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	200 25 1501 SWE



TX emissions band zoomed

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Reference @ 2440.33 MHz	---	---	4.49	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 4880.5 MHz	0	---	41.45	dB	INFO

Verdict

PASS

NA # Peak output power 3MHz/3MHz ~ BT LE 1 Msps

References

TC start	31.03.2025 15:18:55
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	5.1.6.4
Standard Version	NA NI
Method	
Description	Peak OP 3MHz/3MHz - BT LE 1 Msps
Information	

EUT Common Settings BT Low Energy

Intermodulation value N	3
Image freq. Low Mid High [MHz]	0 0 0
Power class	2
1 Mbps supported	True TXpayload 255 RXpayload 255
2 Mbps supported	False TXpayload 255 RXpayload 255
Longrange S8 supported	False TXpayload 255 RXpayload 255
Longrange S2 supported	False TXpayload 255 RXpayload 255
Signaling settings	None HCI 1 2400 None S1 None On
Signaling RF settings	RF1com 0 0 On
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70
Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0

Test Parameter

Technology to test	BT LE 1 Msps
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2402
Frequency mid to test	False Freq [MHz] 2440
Frequency high to test	True Freq [MHz] 2480
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.7
Full path type	EUT_SA_GEN_SIG
Full path name	EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/

Test Parameter

Switch bits	00010001:00010001:00000000:00000001
-------------	-------------------------------------

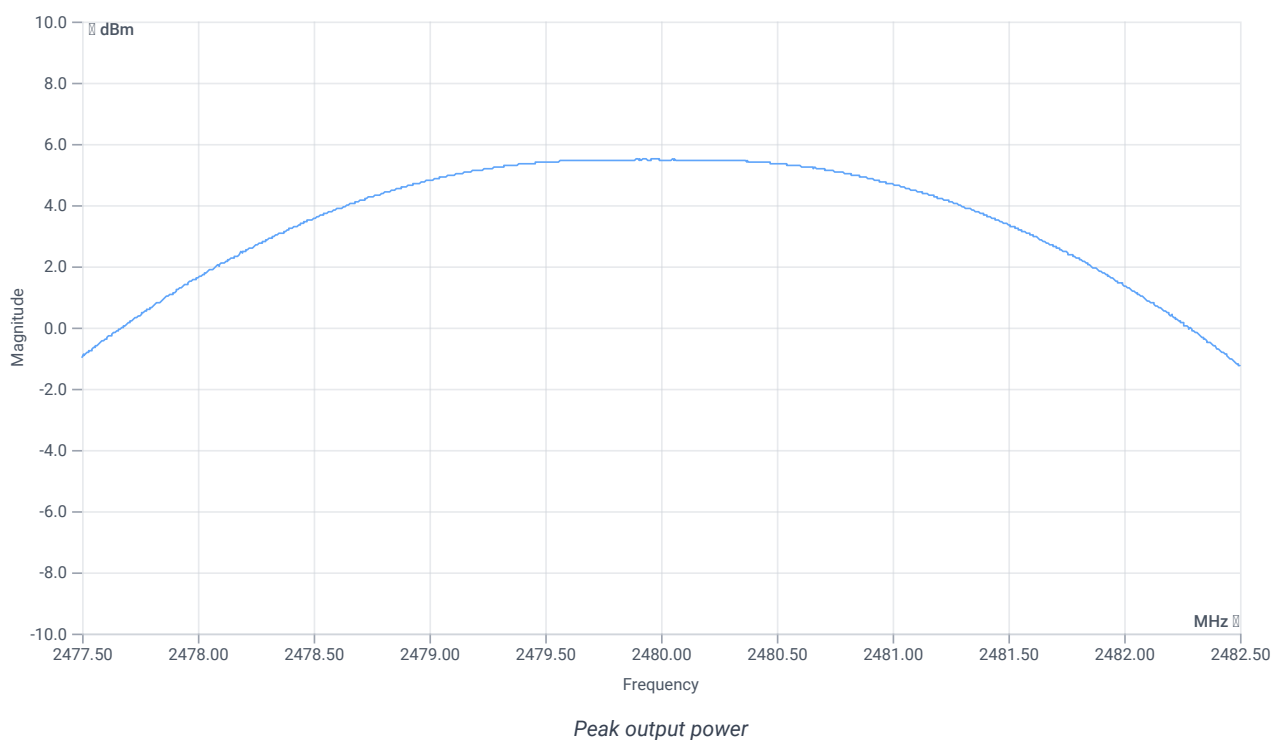
Test at TX 2480 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.45	dBm	INFO
Ref. frequency	---	---	2480.200	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	15.45 9.03 25
Start [MHz] Stop [MHz]	2477.500 2482.500
RBW [MHz] VBW [MHz]	3.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1000 10 1001 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Peak power	---	---	5.5	dBm	INFO
Peak power	---	---	3.548134	mW	INFO
Frequency at peak	---	---	2479.985	MHz	INFO

Verdict

PASS

FCC 15.247 # Maximum peak conducted output power DTS ~ BT LE 1 Msps

References

TC start	31.03.2025 15:19:26
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	5.1.6.4
Standard Version	FCC 15.247 NI
Method	DTS: KDB 558074 D01 V05 - Chapter 8.3.1.1 RBW ≥ DTS Bandwidth
Description	FCC 15.247 Maximum peak output power conducted DTS - BT LE 1 Msps
Information	

EUT Common Settings BT Low Energy

Intermodulation value N	3
Image freq. Low Mid High [MHz]	0 0 0
Power class	2
1 Mbps supported	True TXpayload 255 RXpayload 255
2 Mbps supported	False TXpayload 255 RXpayload 255
Longrange S8 supported	False TXpayload 255 RXpayload 255
Longrange S2 supported	False TXpayload 255 RXpayload 255
Signaling settings	None HCI 1 2400 None S1 None On
Signaling RF settings	RF1com 0 0 On
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70
Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0

Test Parameter

Technology to test	BT LE 1 Msps
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2402
Frequency mid to test	False Freq [MHz] 2440
Frequency high to test	True Freq [MHz] 2480
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.7

Test Parameter

Full path type	EUT_SA_GEN_SIG
Full path name	EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/
Switch bits	00010001:00010001:00000000:00000001

Test at TX 2480 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.45	dBm	INFO
Ref. frequency	---	---	2480.200	MHz	INFO

READ SA SETTINGS:

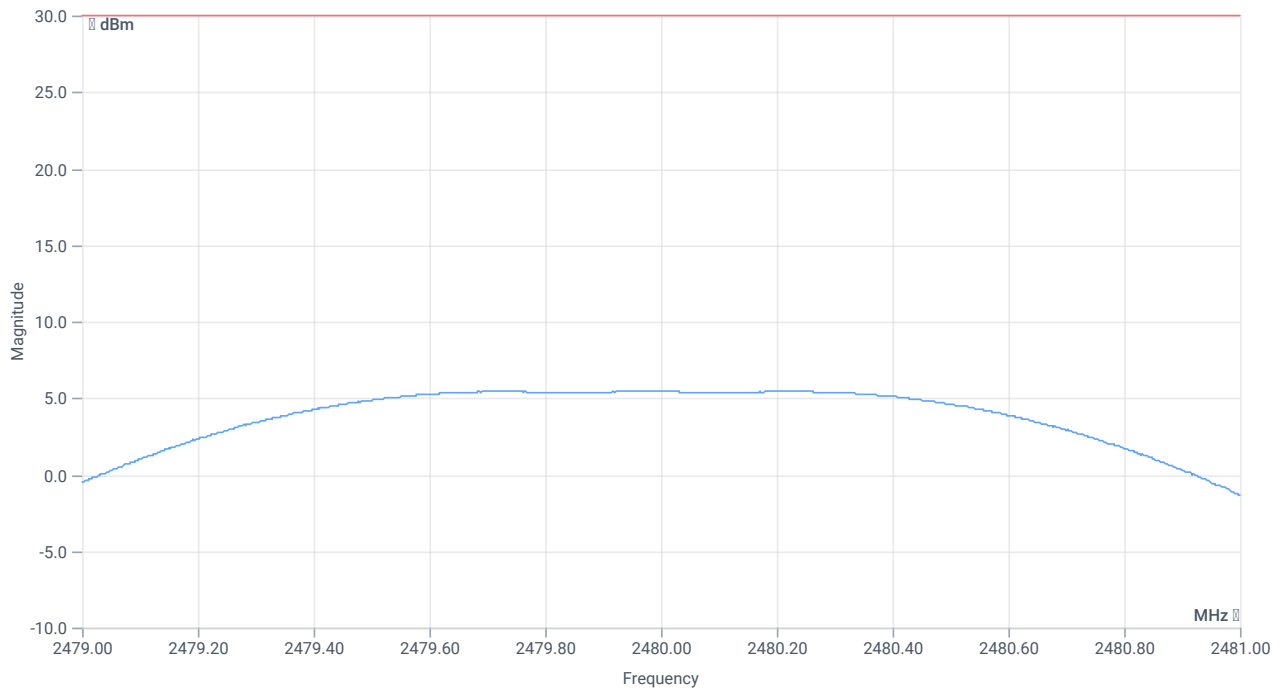
RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.45 9.03 20
Start [MHz] Stop [MHz]	2479.000 2481.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 10001 SWE

DTS bandwidth

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
DTS bandwidth (6dB)	---	---	655	kHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	15.45 9.03 25
Start [MHz] Stop [MHz]	2479.000 2481.000
RBW [MHz] VBW [MHz]	1.000000 3.000000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 1001 SWE



Peak output power

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Peak power	---	30.00	5.46	dBm	PASS
Peak power	---	1000	3.515604	mW	PASS
Frequency at peak	---	---	2479.97	MHz	INFO

Verdict

PASS

FCC 15.247 # Bandwidth 6dB DTS ~ BT LE 1 Msps

References

TC start	31.03.2025 15:20:11
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	5.1.6.4
Standard Version	FCC 15.247 NI
Method	
Description	FCC 15.247 Bandwidth 6dB DTS - BT LE 1 Msps
Information	

EUT Common Settings BT Low Energy

Intermodulation value N	3
Image freq. Low Mid High [MHz]	0 0 0
Power class	2
1 Mbps supported	True TXpayload 255 RXpayload 255
2 Mbps supported	False TXpayload 255 RXpayload 255
Longrange S8 supported	False TXpayload 255 RXpayload 255
Longrange S2 supported	False TXpayload 255 RXpayload 255
Signaling settings	None HCI 1 2400 None S1 None On
Signaling RF settings	RF1com 0 0 On
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70
Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0

Test Parameter

Technology to test	BT LE 1 Msps
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2402
Frequency mid to test	False Freq [MHz] 2440
Frequency high to test	True Freq [MHz] 2480
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.7
Full path type	EUT_SA_GEN_SIG
Full path name	EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/

Test Parameter

Switch bits

00010001:00010001:00000000:00000001

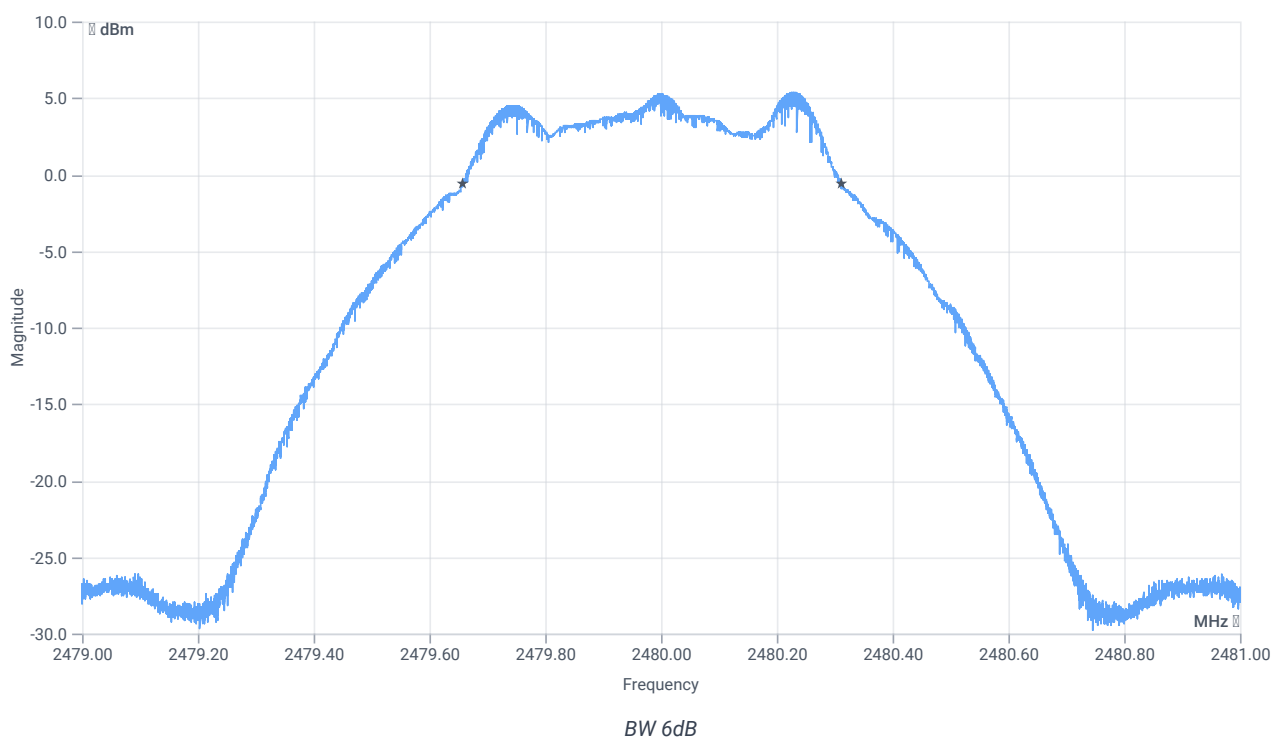
Test at TX 2480 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.45	dBm	INFO
Ref. frequency	---	---	2480.200	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.45 9.03 20
Start [MHz] Stop [MHz]	2479.000 2481.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 10001 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
DTS bandwidth (6dB)	500	---	655	kHz	PASS

Verdict

PASS

FCC 15.247 # Peak psd DTS ~ BT LE 1 Msps

References

TC start	31.03.2025 15:20:44
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	5.1.6.4
Standard Version	FCC 15.247 NI
Method	DTS: KDB 558074 D01 V05 - Chapter 8.4 DTS maximum power spectral density level in the fundamental emission
Description	FCC 15.247 Peak psd DTS - BT LE 1 Msps
Information	

EUT Common Settings BT Low Energy

Intermodulation value N	3
Image freq. Low Mid High [MHz]	0 0 0
Power class	2
1 Mbps supported	True TXpayload 255 RXpayload 255
2 Mbps supported	False TXpayload 255 RXpayload 255
Longrange S8 supported	False TXpayload 255 RXpayload 255
Longrange S2 supported	False TXpayload 255 RXpayload 255
Signaling settings	None HCI 1 2400 None S1 None On
Signaling RF settings	RF1com 0 0 On
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70
Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0

Test Parameter

Technology to test	BT LE 1 Msps
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2402
Frequency mid to test	False Freq [MHz] 2440
Frequency high to test	True Freq [MHz] 2480
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.7
Full path type	EUT_SA_GEN_SIG

Test Parameter

Full path name	EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/
Switch bits	00010001:00010001:00000000:00000001

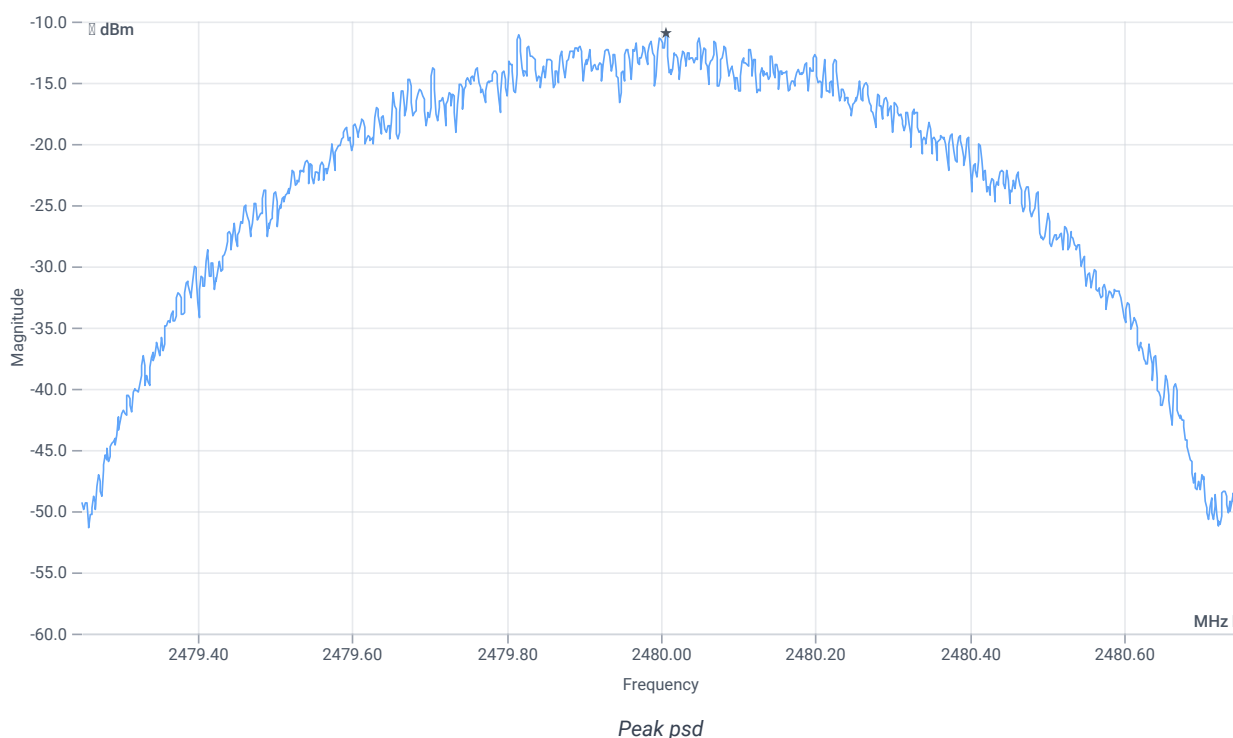
Test at TX 2480 MHz

RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.46	dBm	INFO
Ref. frequency	---	---	2480.200	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.46 9.03 20
Start [MHz] Stop [MHz]	2479.250 2480.750
RBW [MHz] VBW [MHz]	0.003000 0.010000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	1000 20 1001 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Peak psd	---	8	-10.89	dBm/3KHz	PASS

Verdict

PASS

FCC 15.247, ISED RSS247 # Bandwidth 99PCT and 20dB ~ BT LE 1 Msps

References

TC start	31.03.2025 15:21:25
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	5.1.6.4
Standard Version	FCC 15.247, ISED RSS247 NI
Method	
Description	FCC 15.247 Bandwidth 99PCT-20dB DTS - BT LE 1 Msps
Information	

EUT Common Settings BT Low Energy

Intermodulation value N	3
Image freq. Low Mid High [MHz]	0 0 0
Power class	2
1 Mbps supported	True TXpayload 255 RXpayload 255
2 Mbps supported	False TXpayload 255 RXpayload 255
Longrange S8 supported	False TXpayload 255 RXpayload 255
Longrange S2 supported	False TXpayload 255 RXpayload 255
Signaling settings	None HCI 1 2400 None S1 None On
Signaling RF settings	RF1com 0 0 On
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70
Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0

Test Parameter

Technology to test	BT LE 1 Msps
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2402
Frequency mid to test	False Freq [MHz] 2440
Frequency high to test	True Freq [MHz] 2480
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.7
Full path type	EUT_SA_GEN_SIG

Test Parameter

Full path name	EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/
Switch bits	00010001:00010001:00000000:00000001

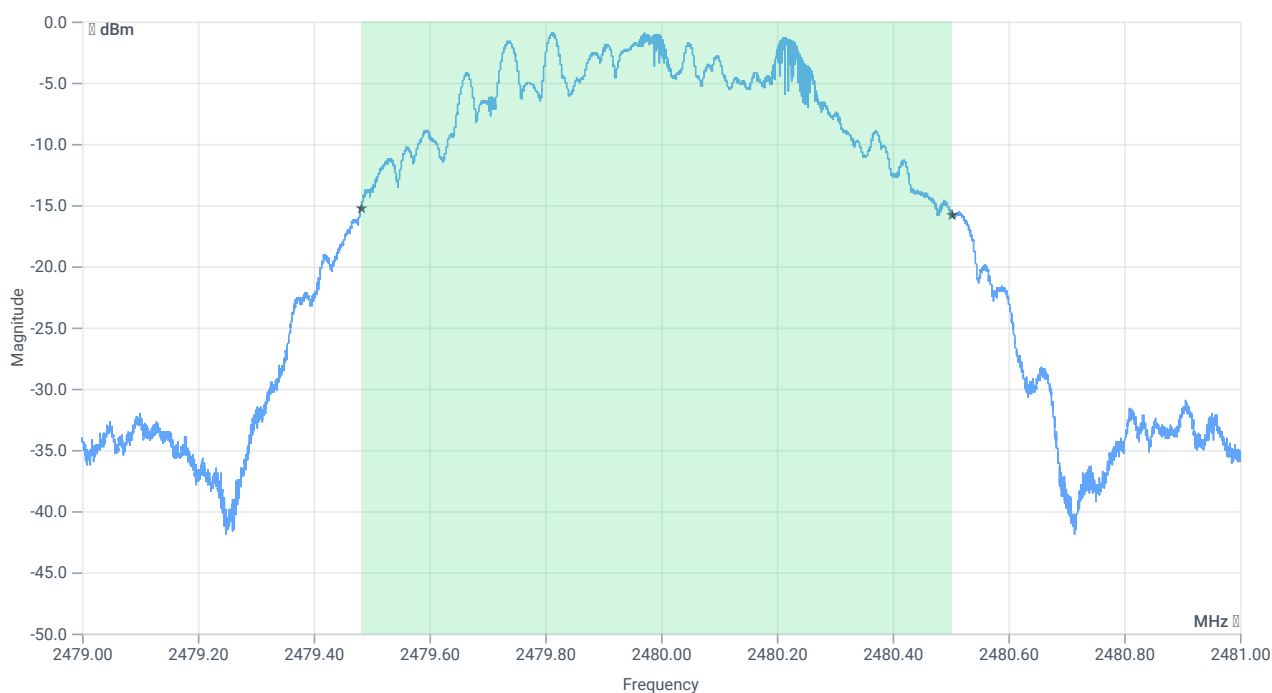
Test at TX 2480 MHz

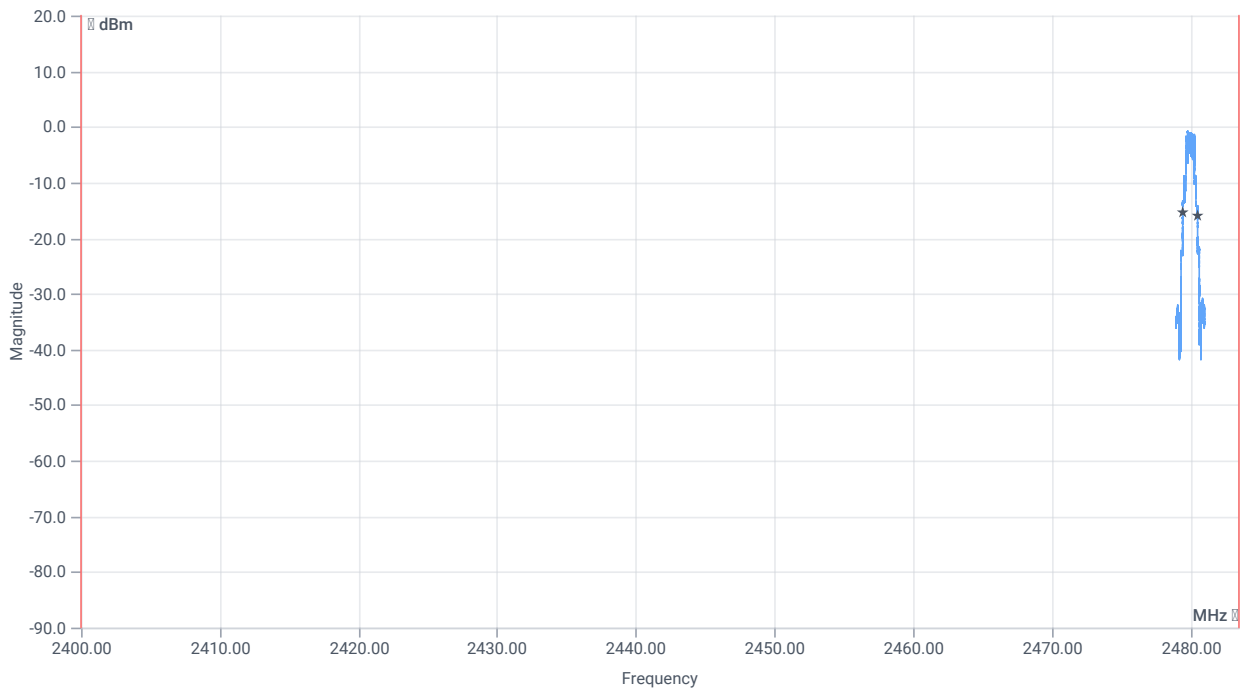
RESULT: Reference power cond.

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.44	dBm	INFO
Ref. frequency	---	---	2480.200	MHz	INFO

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	10.44 9.03 20
Start [MHz] Stop [MHz]	2479.000 2481.000
RBW [MHz] VBW [MHz]	0.020000 0.100000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	50 200 10001 SWE

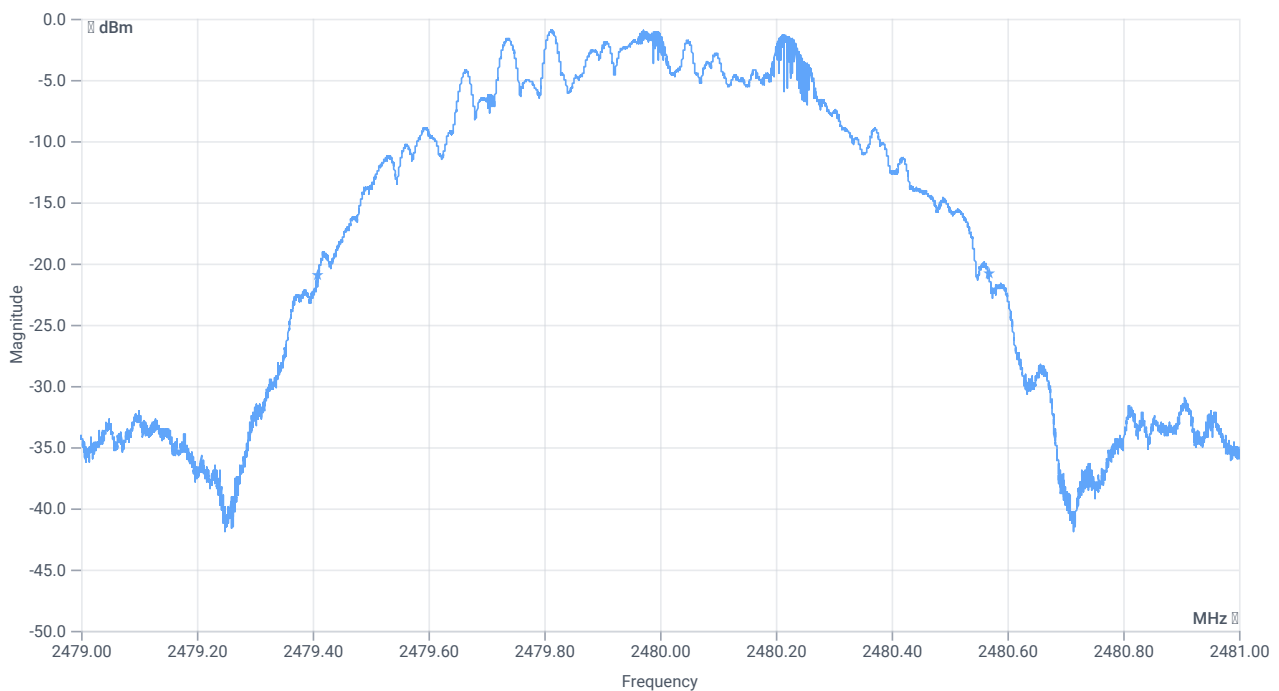




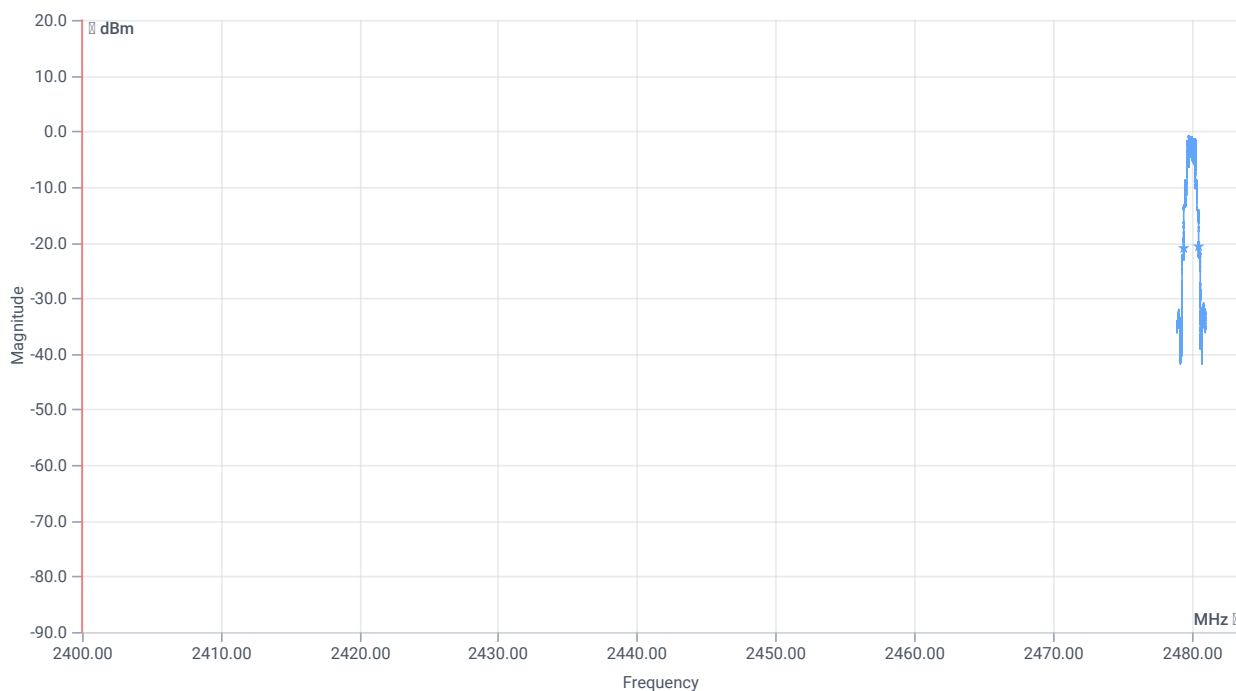
BW within Band 99PCT

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 99%	---	---	1022.000	kHz	INFO
T1 99%	2400.000000	---	2479.4815	MHz	PASS
T2 99%	---	2483.500000	2480.5037	MHz	PASS



BW 20dB



BW within band 20dB

RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Bandwidth 20dB	---	---	1158	kHz	INFO
T1 20dB	2400.000000	---	2479.4092	MHz	PASS
T2 20dB	---	2483.500000	2480.5674	MHz	PASS

Verdict

PASS

FCC 15.247 # TX spurious conducted 20dBc ~ BT LE 1 Msps

References

TC start	31.03.2025 15:22:05
Ambit temp (test rack) [°C] humidity [rel%]	not enabled not enabled
System version	5.1.6.4
Standard Version	FCC 15.247 NI
Method	IF DTS then 8.5 DTS emissions in non-restricted frequency bands: Subclause 11.11 of ANSI C63.10 is applicable
Description	FCC 15.247 TX emissions conducted DTS - BT LE 1 Msps
Information	

EUT Common Settings BT Low Energy

Intermodulation value N	3
Image freq. Low Mid High [MHz]	0 0 0
Power class	2
1 Mbps supported	True TXpayload 255 RXpayload 255
2 Mbps supported	False TXpayload 255 RXpayload 255
Longrange S8 supported	False TXpayload 255 RXpayload 255
Longrange S2 supported	False TXpayload 255 RXpayload 255
Signaling settings	None HCI 1 2400 None S1 None On
Signaling RF settings	RF1com 0 0 On
User interaction	No

Equipment

Signal analyzer,Rohde&Schwarz,FSV-30,1321.3008K30/103170,3.70
Switch matrix,cetecom advanced GmbH,USM,A001,1.0.0

Test Parameter

Technology to test	BT LE 1 Msps
EUT port	EUT1
Temperature	nom
Voltage	nom
Frequency low to test	False Freq [MHz] 2402
Frequency mid to test	False Freq [MHz] 2440
Frequency high to test	True Freq [MHz] 2480
Auto control enabled power supply Climatic Box	No No
Additional path loss [dB]	0.7
Full path type	EUT_SA_GEN_SIG

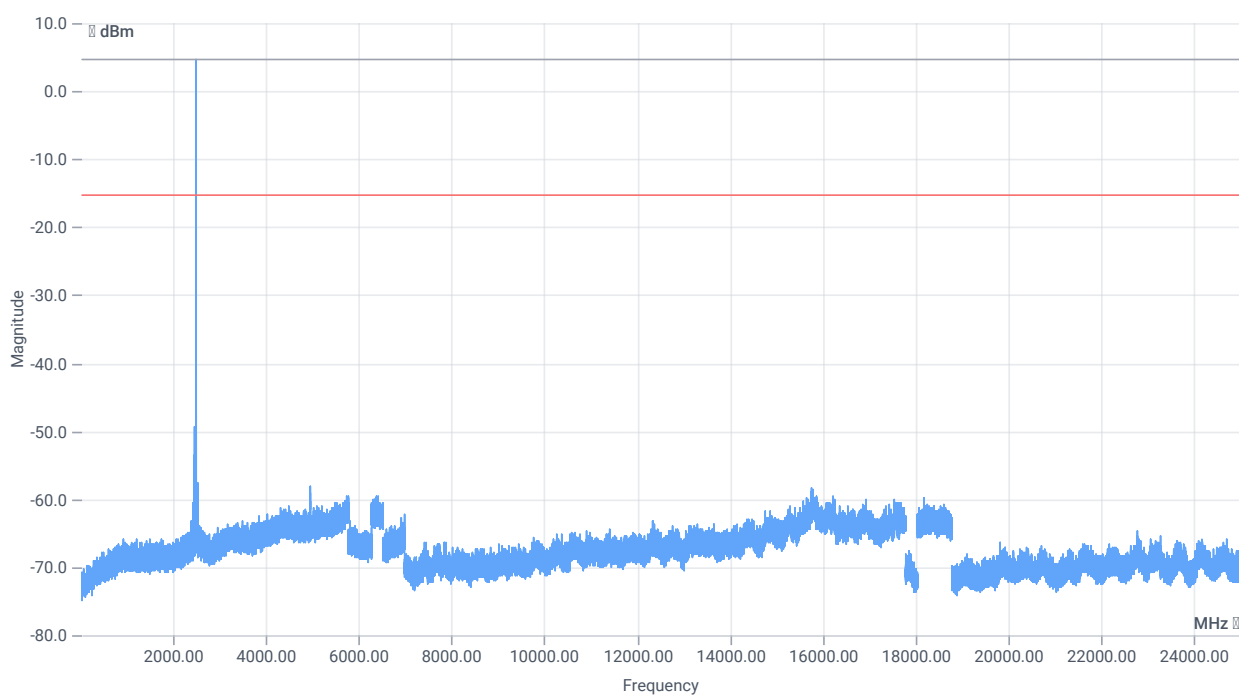
Test Parameter

Full path name	EUT1.MP.SIG1/EUT1.SA/EUT1.GEN1/EUT1.GEN2/
Switch bits	00010001:00010001:00000000:00000001

Test at TX 2480 MHz

RESULT: Reference power cond.

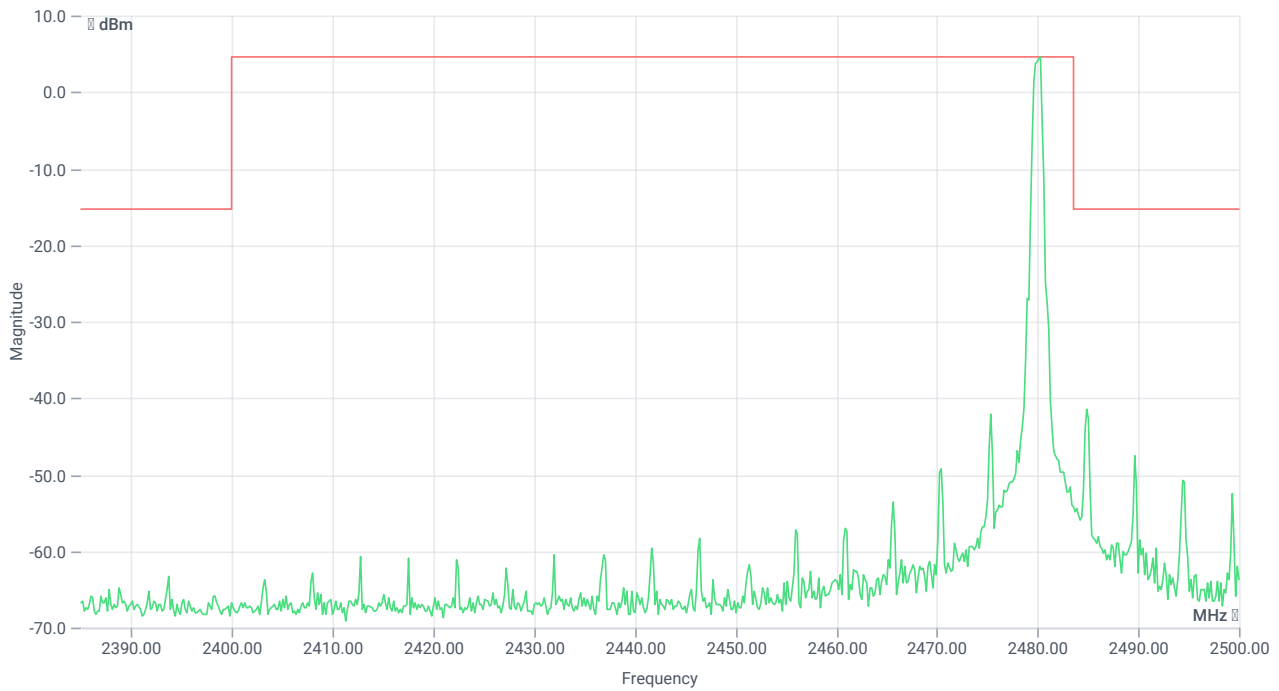
DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Ref. power 1MHz/1MHz cond.	---	---	5.45	dBm	INFO
Ref. frequency	---	---	2480.200	MHz	INFO



TX emissions

READ SA SETTINGS:

RefLevel [dBm] RefLevelOffset [dB] InpAtt [dB]	5.45 17.03 5
Start [MHz] Stop [MHz]	24780.000 25000.000
RBW [MHz] VBW [MHz]	0.100000 0.300000
Detector TraceMode	POS MAXH
Sweep: time [ms] count points per Section type	200 25 1501 SWE



RESULT

DESCRIPTION	LOWER LIMIT	UPPER LIMIT	MEASURED	UNIT	VERDICT
Reference @ 2480.33 MHz	---	---	4.62	dBm	INFO
No peaks detected	---	---			PASS
Lowest margin to limit 2484.833 MHz	0	---	26.05	dB	INFO

Verdict

PASS

- END OF DOCUMENT -